KCG COLLEGE OF TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

RECEIVED PERMANENT AFFILIATION FROM ANNA UNIVERSITY, CHENNAI FROM THE ACADEMIC YEAR 2014 & NBA ACCREDITED

A L M A N A C
2017-2018

VISION AND MISSION

VISION

The department of Information Technology aspires to become a globally acclaimed center of excellence offering quality education and enabling innovative research in Information Technology department by producing competent Information Technology graduates to contribute towards nation building.

MISSION

- ➤ Impart knowledge of fundamentals as well as emerging trends in Information Technology.
- ➤ Inculcate innovative and entrepreneurial abilities as well as ethical values among the students.
- ➤ Establish computing facilities and research activities to enhance the knowledge.
- ➤ Enhancing competency of faculty with the advanced technologies in information technology.

Message from the Head of the Department

"You need mountains, long staircases don't make good hikers."
— AmitKalantri, Wealth of Words

It is with great pleasure I recall the event-filled past year. The academic year 2017-18 was eventful with all round participation and involvement coming from the students and staff members alike in large numbers in different activities across the spectrum of Information technology. It is a matter of great joy to see our students excel in various platforms outside the institute and the faculty members making a mark in the area of knowledge creation and distribution.

Such co-curricular and training programmes help to sharpen one's skills and expertise. The students laid their hands-on internships, in-plant training, attending special lectures from distinguished personalities, proving their mettle in quizzes and hackathons etc. The happiness comes from the fact that most of these events were thoroughly dominated by our students with some single-handed victories. The staff members displayed equal dedication and determination, if not more. Their presence in different events across the broad spectrum of Information Technology has brought in great name for the KCG College of Technology. From augmented training programmes to paper workshops the faculty members laid their hands on anything and everything that added value to self, students and the institute. The faculty members were very adept in conducting programmes as well. These were seen as essential platforms for knowledge dissemination and a unique avenue for peer to peer learning.

To conclude, a fruitful year with systematic addition to the knowledge base and skillsets of our students and faculty members alike is what the academic year 2017-18 was all about. I am happy to present a nutshell of all these activities in a comprehensive form titled *Almanac 2017 -2018*. Read and broaden your horizons on the present-day technology, industry and academia transformations.

Dr. J. Frank Vijay

Message from Mr.Dorai Thodla

While I have had the pleasure of interacting with some of the faculty members and HOD for a few years now, this is the first year; I got a bit closer to students and faculty members. We worked on a few events together and it warms my heart to see the level of involvement by both faculty members and students. Hour of Code was a weeklong event where the members of IT faculty along with CS department as one team. They went around teaching school kids how to code. No one thought at the beginning that we would go to so many schools and improve the computational thinking capabilities of young school students. The schools asking us to come back and do more programs is a great testament to the success of the HOC.

Buoyed by the success of this effort we started others - a build to learn event, women in computing competition. We are looking forward to years of working with every department in the college to improve the IT skills of faculty members and students. This is just the beginning. I am excited to be working with such a devoted team inspired by a dynamic and enthusiastic HOD.

Mr.Dorai Thodla

Editor's Desk

"The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential".

–Steve Ballmer

It is a matter of great honour for me to co-ordinate and compile the activity catalogue of the academic year 2017-18. The Information Technology department of the KCG College of Technology has grown leaps and bounds in terms of the technical collaboration and technological up gradations. This is evident in the humungous increase in the number of activities attended and co-ordinated by both the students and staff members of the department. Students have indeed made their presence felt in different arenas of Information Technology in various institutions across the nation.

The successes obtained in quizzes and hackathons underscore the progress of the students and how adept they are in bridging the theoretical and practical learnings. Faculty members rightly reinforced the efforts of the students by creating and assimilating knowledge about the changing trends in different hemispheres of Information Technology. The development programmes, seminars, training initiatives, projects, and conferences are some of the platforms where my colleagues showed their mettle. I am also reminded of the many such programmes and initiatives conducted by them in our institute for facilitating proper knowledge dissemination and assimilation. The meticulous planning and flawless implementation of such programmes warrant appreciation. The level of dedication and determination my colleagues have put in, to make things happen with scarce resources is second to none.

To conclude, I would like to thank all the contributors for contributing in letter and spirit and urge the readers to consider this as a reference manual which underscores the intensity of activities undertaken by the Information Technology department family towards technological progress, contribution to the world of knowledge and most importantly the forward march of the nation.

- **Ms. Tina Susan Thomas**

Department Advisory Board Committee List

1. Dr.S. Swamynathan is an Assosiate Professor of Department of Information Technology, Anna University, Chennai. He is an expert in the area of Distributed Computing, Advanced Databases and Artificial Intelligence with more than twelve years of experience. He obtained his Bachelor's Degree (A.M.I.E.) in Electronics and Communication Engineering from IE(INDIA).He completed his Masters Degree (M.E.) in Computer Science and Engineering from Anna University, Chennai. He completed his Ph.D in Web Services from Anna University, Chennai in the year 2006.

2. Dr. R. Jagadeesh Kannan is a senior professor with more than 14 years of teaching and industrial experience in various reputed organizations. He is an active member of Indian Society for Technical Education (ISTE), Computer Society of India (CSI), Software Process Improvement Network (SPIN), International Association of Engineers (IAENG), Association of Computer Electronics & Electrical & Engineers (ACEEE), International Association of Computer Science & Information Technology (IACSIT), Research GATE – Scientific Network, Society of Digital Information and Wireless Communications (SDIWC), Computer Science Teachers Association (CSTA), International forum of Researchers Students and Academician (IFRSA) and Lion's Club. He was an active player having a liason with various Institutions, R&D organizations and Industries, to promote various technical activities and is an efficient Team Leader with outstanding organizational and excellent interpersonal skills .

3. Dr.Poonkuzhali Sukumaran is the Vice Chairman of CSI in the academic year 2017 – 2018. She has been awarded the "Shri P.K.DAS Memorial Best Faculty Award-2016" in Information Technology stream under senior category by Nehru group of Institutions on 15/12/2016. She has received funding Amount of Rs 4.70 Lakhs. for the project " Efficient Prediction and Monitoring Tool for Diabetes

Patients using Data Mining and Smart Phone System" under AICTE – Research Proposal Scheme.

4. **Sebastian V.** is a technical driven seasoned Software Testing professional with 12 years of vast testing experience in niche area of Banking and Financial Services. He is an expert in Test Automation and functional testing of Banking, Insurance Trading, Loans and Cards applications. He is working as a QA Manager and has successfully developed and implemented different types of keyword driven frameworks based on customer requirements. He has proved his skills in providing Test Automation Solutions to business stakeholders and IT heads. He is an expert in Agile methodology and tools like JIRA. He is also RPA certified professional.

5. Ms. Saranya Baskar is an expert in software Testing and Development with more than six years of experience. Currently she is a Senior Software Engineer at Hexaware technologies. She has an extensive experience in Functional, Regression and System testing. She is an expert in designing, executing and reporting test cases. She possesses a sound knowledge in analysis of functional issues.

6. Ms.V.Saranya is an alumni of IT department, KCG College of Technology. She secured a university rank in Anna university exam. She has very good technical skills and programming skills. She actively engaged herself in workshops and internships that were conducted in the institute. She possesses good communication skills. She was the only student to get placed in Unitech Transfer, Germany.

7. Mr.Veeramani is the Sub Inspector of Tamil Nadu Police Department. He is the parent of Ms.V. Saranya, alumni of 2016 batch. He was an active member of PTA.

Program Assessment Committee

The following members constitute the Program Assessment Committee:

1. Dr. J. Frank Vijay, Professor & Head – Department of Information Technology
2. Mr. V. P. Sreekanthakumar, Associate Professor – Department of Information Technology
3. Ms. R. Adline Freeda, Assistant Professor – Department of Information Technology
4. Ms. Tina Susan Thomas – Assistant Professor(Sr.Scale) – Department of Information Technology

About The Innovation Mentor

Mr.Dorai Thodla is a passionate multinational serial start up entrepreneur. He is the founder of Technology Strategies LLC, CA, USA. He also founded 4 product start ups - 2 in India and 2 in the USA. He is also the kingpin pillar of product company iMorph Innovation Center in Chennai. Presently, he is the innovation mentor at KCG College of Technology. Prior to that he was the innovation mentor at Hindustan University for two years. He has over 40 years of experience in Software Industry. With his wide experience in industry, and the technological prowess he possesses, he can incessantly generate innovative ideas and imbibe this spirit of excellence into faculty members of Department of Information Technology in particular and KCG College of Technology at large. He is an avid organizer of *hackathons* and events like *Build to Learn*. He motivates students and developers to build Software and Product skills and helps to instill the much-needed startup spirit in the campus. He plays the multifaceted role of a teacher, innovation mentor, startup mentor and Community Builder.

Faculty Profile

Dr. J. Frank Vijay. He did his Bachelor's Degree., B.E (CSE) at Mepco Schlenk Engineering College and his Master's Degree., M.E. (CSE) at PSNA College of Engineering & Technology respectively. He completed his Ph.D. (Faculty of Information & Communication Engineering – Software Engineering Domain) from Anna University, Chennai in the year 2013. Currently he is designated as the **Head of the Department of Information Technology**. He has contributed immensely towards the continuous improvement of the department in areas of academics, research and placement. He has published 12 Research papers in International/Journals and has presented 13 Papers in international conferences. His main areas of research interest include, but are not limited to Software Engineering, Computer Networks and Security, Parallel and Distributed Systems, Cluster Computing, Wireless Sensor Networks and Mobile Computing. He is a member of various professional bodies like Computer Society of India, Institution of Engineering & Technology & the Internet Society.

Mr. Sreekantha Kumar V.P. is an Associate Professor in Department of Information Technology. He obtained his Bachelor's Degree (B.E.) in Computer Science and Engineering from Sathyabama Engineering College, Chennai affiliated to University of Madras. He completed his Masters Degree (M.E.) in Computer Science and Engineering from Sathyabama Institute of Science and Technology, Sathyabama University, Chennai. Currently he is pursuing his Ph.D. Degree in Faculty of Information & Communication Engineering in Anna University in the area of Wireless Sensor Networks. His area of interests include Computer Networks and Cloud Computing. He has published 9 research papers in International Journals and has presented 7 papers in international conferences. He is a member of various Professional Bodies like Institution of Engineering & Technology, Computer Society of

India, Indian Society for Technical Education, Internet Society, and The Society of Digital Information and Wireless Communications.

Dr.R.Anand is designated as Associate Professor in the Department of Information Technology at KCG College of Technology since June 2017. He received a B.E. from Mailam Engineering College, and an M.E. from Aarupadaiveedu Institute of Technology at Chennai. He received Ph.D. in Computer Science and Engineering from Manonmaniam Sundaranar University in 2016. His research interests span across both Cloud Computing and Big data analytics. In particular, he is focusing on virtualization environment based demand applications in the different domain areas. His research work appeared in various national/International journals and conferences. He is a member of the ISTE, CSI, IAENG and Internet Society.

Mrs.R.Adline Freeda. She did her Bachelor's Degree., B.E (CSE) at Sri Muthukumaran Institute of Technology and her Master's Degree., M.E. (CSE) at Rajalakshmi Engineering College respectively. Currently she is designated as Assistant Professor (Sel Grade) of Information Technology. She has contributed immensely towards the continuous improvement in academics. She has been awarded Best Teaching Staff consecutively for three years. She has published 5 Research papers in International/Journals and has presented 6 Papers in international conferences. She is also an Oracle Certified Java Trainer and had conducted Oracle Certified Fundamental Java Course for many batches. She is a member of various professional bodies like Computer Society of India, Institution of Engineering & Technology & the Internet Society.

Mr. Baskar.M. He did his Bachelor's Degree B.E. Computer Science and Engineering, Muthayammal Engineering College, Rasipuram and his Master's Degree M. Tech.in Information Technology from Sathyabama University,Chennai respectively. He is Pursuing Ph.D. (Faculty of Information & Communication Engineering – Computer Network and Security Domain) in Anna University, Chennai. He has published 16 Research papers in International Journals and 7 Papers in National/International Conferences. His main areas of research interest include, but are not limited to Computer networks and Security, Parallel and Distributed Systems and Cluster Computing. He is a member of various professional bodies like Indian Society for Technical Education (ISTE), Computer Society of India (CSI), Institution of Engineering and Technology (IET), The Society of Digital Information and Wireless Communications ((SDIWC), Internet Society, Universal Association of Computer and Electronic Engineers (UACEE), International Association of Engineers (IAENG). He is a reviewer in SCI/Scopus Indexed Springer Journal like Cluster Computing, Multimedia Tools and Applications and Neural Processing Letters.

Mr. N. Bhaskar. He did his Bachelor's Degree in B.Tech(IT) at Vel Tech Engineering College in 2005 and his Master's Degree M.Tech (IT)at Vel Tech MultiTech. Dr. RR & Dr.SR Engineering College in 2011. He is doing his Ph.D. (Faculty of Information & Communication Engineering) from Anna University, Chennai. He is currently working as Assistant Professor (Sr. Scale) in the Department of Information Technology, KCG College of Technology, Chennai. His research interest includes Data mining, Crowdsourcing, and Mobile Computing. He has published 4 Research papers in International Journals and has presented 2 Papers in International conferences. He is a member of Professional bodies like Computer Society of India, Institution of Engineering & Technology & the Internet Society.

Ms. Tina Susan Thomas. She is an Assistant Professor (Sr. Scale) in Department of Information Technology, at KCG College of Technology, Chennai. She holds a bachelor's degree in Computer Science Engineering from Saintgits College of Engineering Kottayam, Kerala and post graduate degree in Information Technology from, Sathyabhama University. She is having seven years of experience in teaching engineering students as she was associated with Saintgits College of Engineering Kottayam, Kerala and presently, KCG College of Technology, Chennai. She has keen interests in research and her papers were published in Association of Information System (AIS) library and other reputed international journals. Her paper on Knowledge Sharing among Researchers was presented in Americas Conference on Information System (AMCIS) 2017 held at Boston, Massachusetts. She is an active member of Computer Society of India (CSI) and Indian Society for technical Education (ISTE). Her academic interests include Knowledge Management, Python, Datamining and TQM.

Ms. Anju.A. She did her Bachelor's Degree., B.Tech (CSE) at Matha College of Technology in Cochin in the year 2007 and her Master's Degree., M.E. (CSE) from Sathyabama University in the year 2013. Currently she is designated as Assistant Professor of Department of Information Technology. She has published around 7 Research papers in International journals and has presented 5 Papers in International/National conferences. Her area of interest includes, Cloud Computing, Wireless Networks and Security. She has organized many events in department level and college level. She always motivated the students to participate in various events like hackathons, project competition, paper presentation, technical events etc. She is the coordinator of KCG Women's Coding Club. She is a member of various professional bodies like Computer Society of India, Institution of Engineering & Technology & the Internet Society.

Ms.V.S.Krithikaa Venket. She did her Bachelor's Degree.,B.Tech (IT) at Dr.SivanthiAditanar College of Engineering and her Master's Degree., M.Tech.(IT) at Dr.SivanthiAditanar College of Engineering respectively. Currently she is designated as Assistant Professor in Department of Information Technology. She has published 8 Research papers in International/National journals and has presented 5 Papers in International/National conferences. Her area of interests are Data Mining& Artificial Intelligence. She is a member of various professional bodies like Computer Society of India, International Association of Engineers & the Internet Society.

NBA Implementation Process

PROGRAMME EDUCATIONAL OBJECTIVES

The graduates will

PEO1 :Have successful career in Information Technology sector.

PEO2 :Engage in lifelong learning and adapt to changing professional and societal needs.

POE3 :Design, implement, test and maintain software systems based on various client requirements.

PROGRAMME OUTCOMES

PO1	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, Societal and environmental considerations.
PO4	Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling

to complex engineering activities with an understanding of the limitations.

PO6 Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7 Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES

PSO1

Design system to solve complex IT related problems using algorithm analysis, database technology, multimedia, web design, networking and principles of Software Engineering, to face the challenges in corporate and industries.
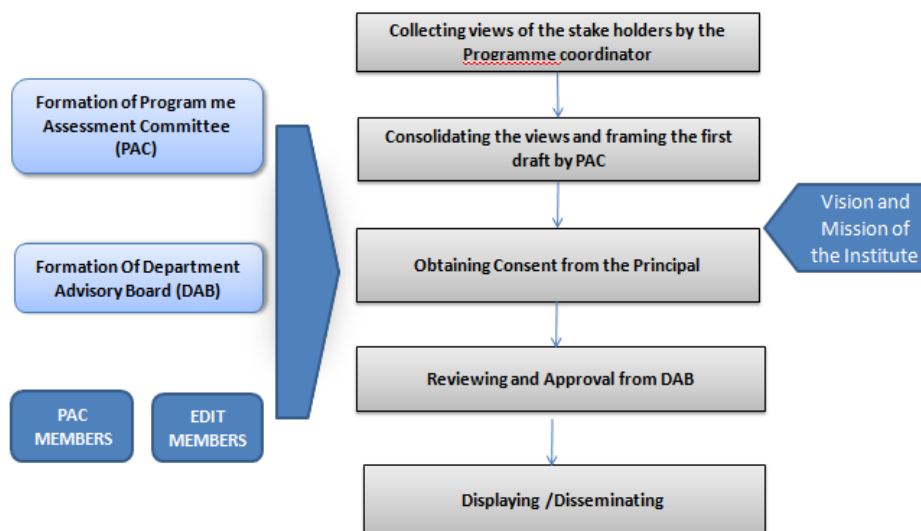
PSO2

Communicate and function efficiently as an individual and as a member or leader in Multidisciplinary teams in software development process.

PSO3

Identify the need for sustainable development in software industries and follow the professional code of ethics.

PROCESS OF DEFINING VISION, MISSION, PEO & POs OF THE DEPARTMENT

Diagrammatic Explanation of the Vision and Mission Formation

The process of defining the vision, mission of the department along with the Program outcomes and program education objectives follows a comprehensive brainstorming and analysis with two sets of decision makers. The Program Assessment Committee consists of a group of internal staff members who perform the analysis of the requirements of education to be imparted, in line with the comprehensive feedback provided by the students and department alumni. After the initial analysis process, the views, inputs and suggestions received are consolidated as a draft by the PAC and it is submitted to the principal of the institution. Once the principal checks and ratifies that the draft is in line with the vision and mission of the institute, the draft is submitted to the Department Advisory Board (DAB) which consists of several industry experts who provide their views on the Program educational outcomes, the program outcomes and the vision as well as the mission of the department. This comprehensive process ensures that the quality standards set by the department are extremely high and simultaneously in line with the industry requirements.
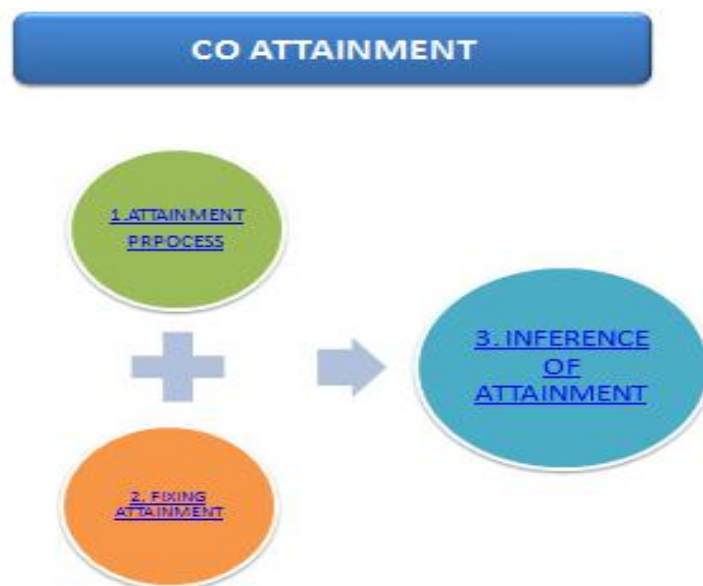
ASSESSMENT PROCESS OF COURSE OUTCOME

The department conducts a comprehensive assessment process for all students .This consist of regular tests and challenging experiments in the lab, which culminate with the university examinations. There is a constant evaluation and analysis process conducted by the staff to ensure that the course outcomes for each subject are met. If there are any concerns regarding the course outcomes and any short comings in achieving the same necessary action is taken to rectify the problem. This includes tutorials and value added programs being instituted.

COURSE OUTCOME ATTAINMENT PROCESS

The course outcome attainment process consists of two steps
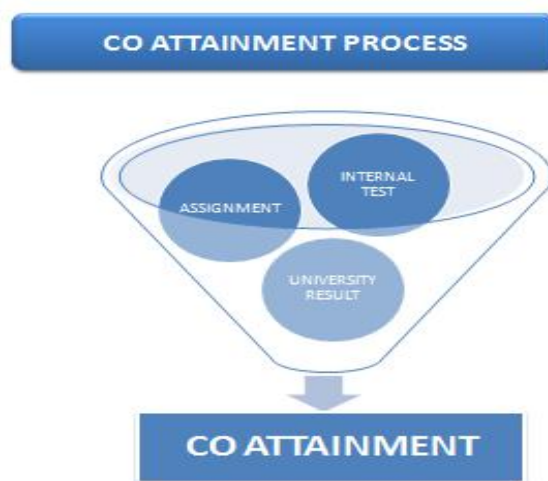
>Attainment Process

>Fixing Attainment

Diagrammatic Representation of Course Attainment Process

Attainment Process

The course outcome for a particular course will be attained by the internal assessment Test, Assignments & University Result. Each students course attainment will be calculated, the marks the student has scored on the tests, assignment & university result.

Course Attainment Process

Fixing Attainment

The attainment fixation process is a crucial part in the OBE Process.The program assessment committee fixes the attainment level for a particular batch based on the following parameters

>Batch Performance- Considering previous University Examination Result

>Type of Course- (Theory/Analysis)

>Medium of Course-(Tough/Medium/Easy)

>Batch of Course- (Theory/Analysis)

Based on the above said parameters, final attainment levels for a particular batch will be fixed.

CONTINUOUS PROCESS IMPROVEMENT

KCG College of Technology have implemented OBE (Object Based Education) concept from the year 2015. The attainment level for the batches from 2011 to till date were fixed. Various measures have been taken in the department for continuous process improvement.

CURRICULUM GAP IDENTIFICATION PROCESS
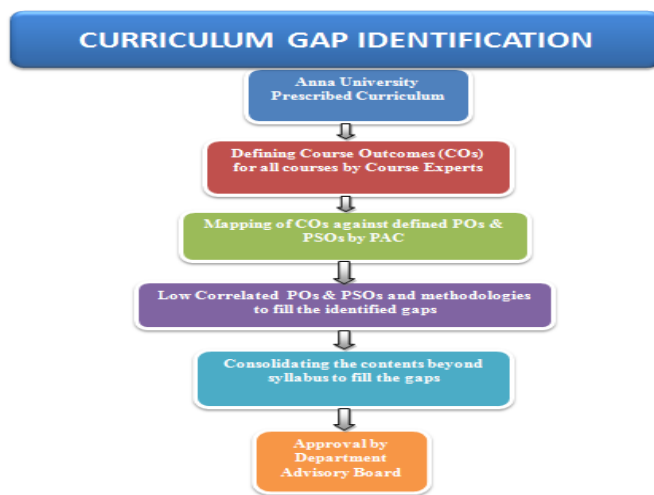
Curriculum Gap Identification Process

A gap analysis is about finding the differences between the situation called 'where we want to be' and the situation called 'where we are now'. 'Where we want to be' requires a clear idea of the new demands. This clear idea of the future needs to be compared with a clear idea of present curriculum. This involves a rigorous analysis of the status quo; not only is what being done, but also how, why, and by whom, in order to identify the problem areas between what we have and what we want. The gaps between the two situations are the areas for the focus of change. The course experts will define the course outcomes for all the courses prescribed by the Anna university curriculum. These course outcomes are mapped against the already defined Program Outcomes (Pos) and programme Specific Outcomes (PSOs) by the Programme Assessment Committee (PAC). The mapping will be done as high, medium and low. The low correlated Pos and PSOs ae identified and they are used to fill the curriculum gap by value added programmes, guest lectures for the content beyond syllabus and so on.

Academics

With the vision to become a globally acclaimed centre of excellence offering quality education and enabling innovative research, the department of Information Technology, KCG college of Technology under the leadership of Dr. J. Frank Vijay and with the cooperation of the dedicated team of well-qualified faculty members are constantly striving to improve the academic standards. The Department which is a home for 141 students has excellent infrastructure in terms of laboratories, classrooms, seminar hall etc.The department had a tremendous achievement of filing five patents in the last academic year. The department was ranked one among the **Nation's TOP 65 in AICTE – CII Survey.**

The department has equipped itself with indigenous mentoring programme which keeps a tab on the performance and improvement of students in various tests and addresses other curricular and extra-curricular needs of the students through 24x7 faculty-student interaction even using the WhatsApp platform. This is in addition to the institute promoted counselling programme where the teachers act as vital support mechanism for the students. Over the years such small group interaction has proved effective and is the kingpin factor which underscores the excellent performance of the department. The department always stays in touch with the parents. The messaging service is utilized for immediate communication regarding late arrival of students, fee default, etc. The teachers with the adequate help from IT secretary make it a point to communicate to the parents about the performance of their wards on a regular basis.

To cope up with the emerging challenges, various add on courses and other activities are offered to students apart from the curriculum syllabus specified by the Anna University. "**Campus Connect**" – an INFOSYS Industry – Academia partnership program was conducted for students by the department faculty members - Ms. Anju A, Ms. R. AdlineFreeda and Ms. Tina Susan Thomas. In the last semester, the Value-Added Program **INFOSYS CAMPUS CONNECTS FP 5.0 on PYTHON PROGRAMMING** was conducted for the IV-year students in order to enrich their programming skill in Python because Python is a powerful high-level, object-oriented programming language

and the norm of industry nowadays. It has simple easy-to-use syntax, making it the perfect language for someone trying to learn computer programming for the first time.

Since it is a fundamental course, all the students of the IV year were actively involved in the Value-added program. The Course was scheduled for 6 hours per week. It was a 45 hrs Value added course in which the basic concepts were covered and also the Object-Oriented Concepts were taught. For each session, a brief explanation about the topic, a sample program and an exercise problem is given to the students. This helps the students to have a thorough Knowledge on each concept.

Objectives of the Course included:

➢ Emphasis on self-Learning

➢ Learning assurance through quiz and assignments
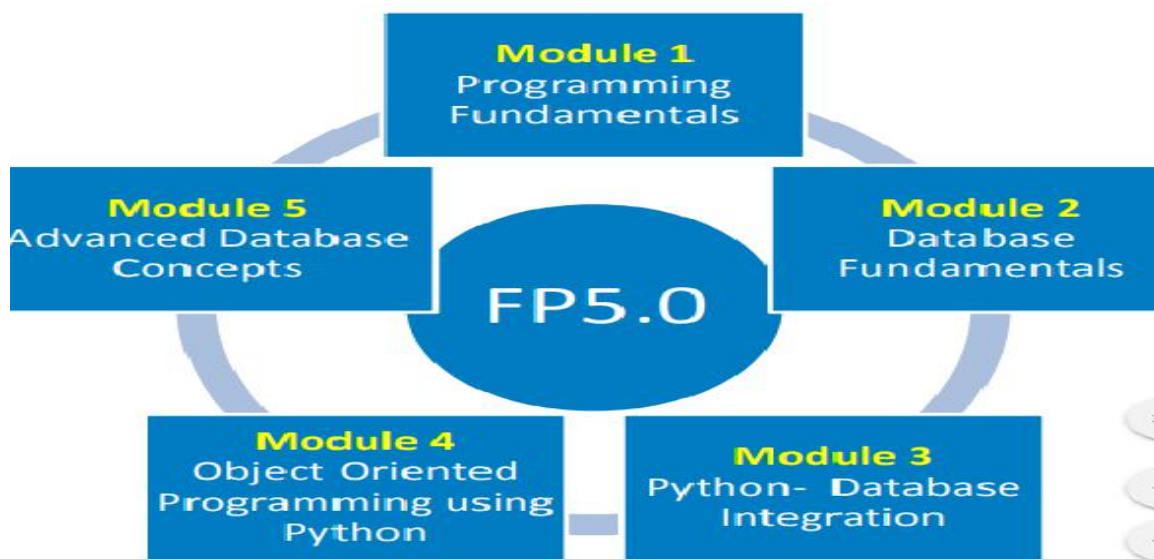
Course Modules of Infosys Campus Connect Program

Following 3 modules were covered:

Module 1: Programming Fundamentals followed by project -1

Module 3: Python Database Integration followed by project -3

Module 4: OOP using Python followed by project -1

An Infosys Campus Connect account was created for each student from which he or she was able to view the FP 5.0 Python Programming contents and take up assessment which involves only 25 multiple choice Questions. The evaluation was based on the Bank Account Analysis project demonstration and the assessment marks.As an Outcome, All the 34 students had taken the Certification Test from their own login id and many students had cleared the test and obtained the certificates.

Also, a course on **Cyber Security Tools** was conducted by Ms. R.N. Sharmila for the final year students. The course was designed for personal and home cyber security, privacy and anonymity. Most of the topics apply in the same way to a business, but the course was delivered as if to an individual for personal cyber security, privacy, and anonymity.

In the even semester dedicated value-added programmes were conducted in Java, Python and Big-data for second, third and final year students respectively. The programme on Java was **Oracle Certified Value-Added Course on Java Fundamentals** and was handled by Ms. R. AdlineFreeda, Ms.Anju. A and Ms.Krithikaa Venket. It was designed for the II yr students in order to enrich their programming skill in java as it is the base of any underlying Technology. Since it being a fundamental course, all the students of the II yr were involved in the value-added program. The students were split into two batches. The Course was scheduled for 3 hours per week for each batch in both the labs of IT Department. It was a 45 hrs value added course in which the basic concepts were covered and also the Object-Oriented Concepts were taught. A manual was given to each individual student covering all the topics prescribed by the oracle academy for this fundamental course.

Hands on Session DuringVap

Students Taking up Oracle Certification Online Examination
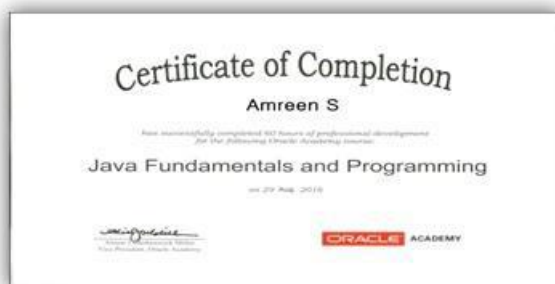
Amreen.S., Who have got certification after completing Java Fundamentals & Programming Certification Exam

Similarly, **45 hour scheduled programmes were conducted for Python** by Mr. M.Baskar and Ms.Tina Susan Thomas for the third year students and **Dell EMC² Certified Big Data Analytics** for final year students by Mr. Sreekantha kumar V P, Dr.R. Anand and Mr. N. Bhaskar. Python being a high-level language which can be used to develop software with minimum number of codes adds the versatility of the language and underscores its recent popularity. Thus, Python was a great value-addition to the current students as they got a head start on what is being the present norm in the industry. The efforts taken by the in-house faculty members in bringing out a comprehensive syllabus and the effective execution of the same is highly commendable. The department was also fortunate in getting the timely instructions

and guidance from Mr. Dorai Thodla, who took keen interests in enhancing the programming skills of our students.

Data Science and Big Data Analytics are exciting new areas that combine scientific inquiry, statistical knowledge, substantive expertise, and computer programming. One of the main challenges for businesses and policy makers when using big data is to find people with the appropriate skills. Good data science requires experts that combine substantive knowledge with data analytical skills, which makes it a prime area for social scientists with an interest in quantitative methods. Under this premise special training was given in Big Data for our final year students. The programme was scheduled for 3 hours per week, in Bill Gates Programming Laboratory. In the 45 hours value added programme, the following course modules were taught:

1. Introduction to Big Data Analytics
2. Data Analytics Life Cycle + Labs
3. Review of Basic Data Analytics Methods Using R + Labs
4. Advanced Analytics – Theory & Methods + Labs
5. Advanced Analytics – Technology & Tools + Labs
6. The Endgame, or Putting it All Together + Final Lab

A study material was given to each student participants covering all the above modules prepared by ICT Academy of Tamil Nadu, and the DELL EMC for this value-added programme. For each module, detailed explanation and sample exercises were given in the material. This helped the students to have a sound knowledge on each module.

Student Performance: An Overview of the initiatives undertaken

Examinations were conducted on a regular basis to evaluate the knowledge level of students. Remedial programs were categorically designed to bridge the gap between what a student knows and what he's expected to know. The department organized specific library hours to facilitate the reading habits of the students. Such a measure had evidently improved the analytical skills of the students' manifold. Specialized

training was also conducted by in-house faculty member, Ms. Tina Susan Thomas on **"*How to write well in Examinations*".**

Training about "How to write well in Examinations"

Placement training was another cynosure of the department. The department was specifically keen in handholding the students to successful placement processes under the leadership of department placement co-ordinator, Mr.N.Bhaskar. The effort did not stop there. Continuous training was given even after the successful placements with the intention to make them excel in their respective organizations in future. Special hour was allocated for final year students and **training on core subjects** was given by Dr.R.Anand, Ms.Tina Susan Thomas and Ms.Krithikaa Venket. As a result of all these activities and initiatives, the Department of Information Technology was able to pull out success both in academic and allied activities. The students of the department secured university rank consistently in all the previous years.

Anna University rank holders from the department

Result analysis:

The students of IT department tried their maximum to pull out good results in university exam. **The final year students led from the front with more than 85% pass percentage.** The need to excel in their career by setting a strong foundation in academics was underscored by the performance of our final year students. The department pass percentage improved leaps and bounds. The second year and third

year students were successful in improving their performance by a great margin, when compared with previous semesters. Students who bought laurels to the department with their stellar performance were felicitated by the institute. It is a matter of appreciation that the following faculty members could bring out above 90% marks in the university examination.(See below table)

NAME OF THE FACULTY	COURSE CODE & COURSE NAME	PASS PERCENTAGE
Dr. J. Frank Vijay	IT6004 Software Testing	100
	IT6601 Mobile Computing	94.1
Ms.AdlineFreeda R	IT6701 Information Management	100
	GE6075 Professional Ethics in Engineering	96
Dr. R.Anand	CS6703 Grid and Cloud Computing	100
Mr.Sampath R	IT6702 Datawarehousing and Datamining	97.05
	CS6601 Distributed Systems	94.12
Mr.M.Baskar	CS6660 Compiler Design	91.18
Ms.R.N.Sharmila	IT6602 Software Architecture	91.18
Ms.S.Subbulakshmi	CS6001 C# and .Net Programming	100
Mr.B.Hariharan	GE6757 Total Quality Management	100
Dr. R.Rajkumar	IT6801 Service Oriented Architecture	92

KCG Annual awards

The students of IT department tried their maximum to pull out good results in university exam. The second year and third year students were successful in improving their performance by a great margin, when compared with previous semesters. Students who bought laurels to the department with their stellar performance were felicitated by the institute.

Ms.R. Divya Karthiga receiving award for securing First Place in Second Year in Academics (8.36 GPA) in KCG Annual Day

Ms. N. Roshan Shahul, receiving award for securing Second Place in Second Year in Academics (8.12 GPA) in KCG Annual Day

Ms. Sorjeeta Gupta, receiving award for securing First Place in Third Year in Academics (8.02 GPA) in KCG Annual Day

Ms. Lalitha. T. , receiving award for securing First Place in Third Year in Academics (7.3 GPA) in KCG Annual Day

Department Activities

The Department is devoted to foster the fundamental principles and understanding of technology to enhance the students' basic knowledge of Engineering. Its objective was to provide value-based education to the budding scientists and engineers. Both the students and faculty members had great opportunities for participating and conducting various technical events. A nutshell of all those initiatives and activities are categorized and listed below:

1. Students attended:

Report on Internship Program conducted by Pantech from 12.06.17 to 19.06.17

Ms. Srinidhi Srinivasan of 3rd Information Technology Student, attended an internship program in Android Application Development at Pantech Solutions Pvt Ltd from 12.6.17 to 19.6.17. Android is the fastest growing smart phone OS in the world today. Currently, Android has a market share of 57% in the worldwide smart phone market. Android programming language is backed and developed by Google and Open Handset Alliance (a consortium of 84 firms). The number of handsets running on Android increases by 21000 fresh and new installs per day and that is good enough reason for one to start developing applications and games for that market / audience. It was a very informative internship training program along with great examples and exercises.

Pantech Certificate of Ms. Srinidhi Srinivasan

Report of "Automation with Arduino Workshop" held on 09.07.2017

The objective of this workshop was to provide an opportunity for students to get aware of ARDUINO thereby developing a stepping stone towards the development of an Embedded System. Mr. K.T. Naveen & Mr. E. Joseph Dhanraj of 3rd I.T students attended the one day workshop in "Automation with Arduino Workshop" at Makers Arena, Chennai on 9th July 2017.

Programme Summary

First session started at 9:30AM by an Introduction to ARDUINO by expert Mr. Jitendra Patel from M/S Excel Kits and Prof. Nehal Shah, Associate Professor, E&C Department. By this session students got an indepth knowledge of ARDUINO and hence were able to technically decipher the working of ARDUINO and its application in various domain of present technological era. After lunch second session comprising of hands on training of ARDUINO was conducted by Mr. Jitendra Patel, Prof. PriteshSaxena, Assistant Professor, E&C Department and Prof. Bhargav Shah, Assistant Professor, E&C Department. The laboratory sessions included working with various peripherals including LED, Switches, Serial Port, Light Dependent resistance, Intensity variation using PWM, Relay Control using TSOP Sensors and many more. The Third session was initiated with a competition among the participants team they

used their entire day gained knowledge to do an assigned task in stipulated time where the team completing the given task with minimum time was declared as winner. Certificates were distributed at the valedictory function held at 4:00PM.

Certificate – Mr. K. T. Naveen & Mr. E. Joseph Dhanraj – Android Workshop

Report on Expert Guest Lecture on "Demystifying Cyber security (Threats & Responses)" in association with IEEE Computer Society held on 14.07.17

The Students of Information Technology Department (C. Abilash, M. Sriram, K. Yaminee, V. Vimalraj, Pranamya.G., Perinban. P., Muthuramakrishnan.M, Maria RashmiFernando.M., Karthikeyan.J.,DivyaPriya.V., Dhinakar., A.S., Amreen.S., Ezhilraj. R.) of Final Year & (Sorjeeta Gupta, Revathy.S. &Lalitha.T) of Third Year with Ms. R.N. Sharmila, Assistant Professor – KCG College of Technology, attended a expert lecture on "Demystifying Cyber security (Threats & Responses)" in association with IEEE Computer Society, at 14th July 2017, Hindustan University. Dr. Venkat, welcomed Mr. Ramesh, Cyber Security Technologist, Oracle, USA. The resource person explained about the various security threats and he also quoted that "Security is a negative goal". It is always a myth and a social concern. There is no 100% security protection and only the organization or individual can take all possible measures to reduce the risks.

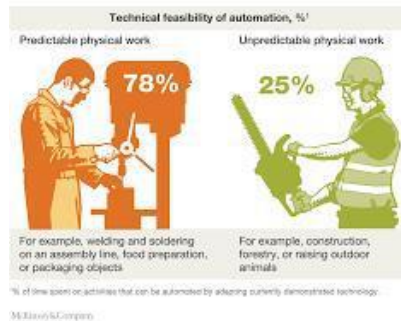**Banner of Demystifying Cyber Security (Threats & Responses)**

Panel Discussion - Demystifying Cyber Security (Threats & Responses)

Report on "Automation & Job Opportunities"

The Students of third year Information Technology attended the Infosys Campus Connect Programme about Open Discussion on Emerging Technologies in IT Industry (Automation & Job Opportunities) on 11th August 2017 at KCG College of Technology. Dr. M. Krishnamoorthy., HoD -CSE welcomed the gathering and Mr. V.P. Sreekantha Kumar introduced the Chief Guest - Mr. Selva Kumar., V.R., Project Manager, -RCLADM Sysco, Infosys Limited, Mahindra City, Chennai to the gathering. Today, we are at the beginning of a Fourth Industrial Revolution. Developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing and biotechnology, to name just a few, are all building on and amplifying one another. This will lay the foundation for a revolution more comprehensive and all-encompassing than anything we have ever seen.

It's more technically feasible to automate predictable physical activities than unpredictable ones.

Technical feasibility of automation, %

Predictable physical work — 78%
Unpredictable physical work — 25%

For example, welding and soldering on an assembly line, food preparation, or packaging objects

For example, construction, forestry, or raising outdoor animals

INNOVATION   PRODUCTIVITY   BUSINE
AUTOMATION
PROCESS   TECHNOLOGY   SYSTE

Report about Campus Lecture Held at KCG College of Technology in association with IIT Pals, Chennai.

The Students of third year Information Technology attended the campus lecture held at KCG College of Technology campus, Chennai on the 17th August 2017 from 10:00 A.M to 13.00 P.M.

The Chief Guest, Mr.Brajendra Das, Gamesha discussed about the "Taming the Sun" and Mr. V. Vaidyanathan discussed about the "My Journey - Entrepreneurship". The entire session was very useful to the participants.

Group Photo – Campus Lecture - Mr.BrajendraDas &bGamesha

Campus Lecture – Inauguration Photo

Report on IEEE Quiz 2017

The Department of Electrical and Electronics Engineering, KCG College of Technology organized "QUIZ 2K17"on 19th August 2017 at 2.00 pm under KCG IEEE Student Chapter in association with IEEE Control System Society, Madras Section. The inaugural function commenced at 2.00 pm in EEE Department. The meeting was presided by Dr. P.DeivaSundari, Head of the Department/EEE. Around 77 participants registered for the programme. The preliminary test for the registered participants was conducted on 11/08/17 in EEE Department class rooms. From the prelims, 5 teams were shortlisted for the finals. One team from each department (EEE, EIE, ECE, MECH and IT). Totally 20 participants were shortlisted for final "QUIZ 2K17". In the finals, there were three rounds like relatives, Music and Movie. The following department won the prizes:

I Place – Department of EEE

II Place – Department of EIE

III Place – Muthuramakrishnan, Ezhilraj, Akash& Kevin - IT

The programme concluded with the prize distribution by Dr. G. Prabhakaran, Principal, KCG College of Technology, Chennai.

Information Technology Students Won third Prize in IEEE Quiz Competition

Report on Campus Lecture Held at Loyala ICAM College of Engineering & Technology

The Students of Final year Information Technology (Bhuvanesh. V., Balagowsik.S.,Vishnu.P., Vimalraj. V.,&Alagappan. P) attended the campus lecture held at the Loyala ICAM College of Engineering Technology (LICET) campus, Nungambakkam, Chennai on 22nd August 2017.

The first program of PALS for the year 2017-2018 after the Grand Inauguration was the Campus Lecture held at the Loyola ICAM College of Engineering Technology (LICET) campus, Nungambakkam, Chennai on the 22nd August 2017.

The bustle in the morning, weaving into the sprawling campus the PALS team and the speakers were welcomed warmly by the LICET Dr.Saraswathi, Dr.Selvanayagam and Dr.Kunaraj. The program started with Ms.Anjali, student of LICET being the MC and introducing the PALS program, the speakers, the PALS team and the dignitaries from LICET. She then called upon PALS core team member Mr.R.KrishnamurthiRao who

spoke about PALS's inception, then gave a brief description on the events planned for the year. He then introduced each of the PALS members namely Mr.S.Subramanian, Mr.B.Gautham, Ms Anuradha (The General Manager), and Ms.Anuradha Shankar. The speakers were given mementos by Dr.Selvanayagam, EC Member, PALS and Dean Research, LICET. Then Mr.KrishnamurthiRao explained the format of the campus lecture for the day and Introduced Mr.N.Umashankar AGM Engine Development, Ashok Leyland who was the first speaker of the day and requested him to give the first talk.

Mr.Umashankar's topic for the day was "Design and Development Techniques for reduction of Development Time". Starting with a basic introduction into the manufacturing world, he took pains to explain the importance of the QMS for sustained development. He talked about processes, categories of processes, giving examples from everyday life.

Mr.Krishnamurti after thanking Mr.Umashankar introduced the next speaker Dr. K.Subramanian, CEO and Head R&D Power Gears Ltd., and invited him to the podium for the talk on "Problem solving in real world".

Mr.Krishnamurti after thanking Dr.K.Subramanian introduced the next speaker Mr.DeepakMirza, Entrepreneur and invited him to the podium for the talk on "Life and Career Fundas". Mr.Deepak's voice reverberated with the truth and advice from the heart to the next generation. It was a wakeup call in the true sense (for the sleeping souls) to get into action in the right direction. His casual manner belied the serious topic and very often brought the audience to peals into laughter. He did a great job getting the students to discuss all their problems with recognition in big and small groups. The floor was thrown open for the flood of questions from enthusiastic questions to all the three speakers. Many a doubt cleared and cloudy thoughts vaporised, time brought the gathering back to earth. Ms Anuradha explained the online quiz which will be awaiting reponses from 1pm till midnight the same day She also elucidated the various criteria for the prizes for the quiz and awards at the end of the academic year.

Campus Lecture Discussion Photo

Students Activities for the Academic Year 2017-2018 (Nut Shell)

1. Students participated in Project Contest & Paper Presentation FUTURA17'A national level Tech Fest & Project Design Contest on 7th -9th Sep 17 at BIT, Erode.

2. Praveen R ,Sivabalaji, Uvashri D of third year IT students had participated SSN Hackathon on 8th & 9th Sep 17 at SSN College.

3. Maria Rashmi Fernando.M., DivyaPriya.V.,Amreen.S of final year IT students had participated Paper Presentation Agni Fest2K17 and got **First Prize** in the event.

4. Ms. SrindhiSreenivasan, Ms. Saranya P Lydia, Mahalakshmi P Logeshwari,Sruthi S, Prithika, Amudhavalli of IT had attended the workshop on Business Plan at HITS Padur 12th July 2017.

5. Induja R V,Nishanthini had attended the workshop on Coorporate Training Test Android Workshop on 23/12/17 at Coorporate Training Test,Chennai.

6. Students participated in the Technical Event Kurukshetra '18 on 31-1.18 to 2.2.18 in Anna University.

7. Nishanth K R of IT had participated in Think And Create Engineer organized by IIT PALS-Residential Training Program, IIT Madras on 27-29/12/18.

8. Roshan Shahul,Sarikka had participated in Coding Competition Hack-Rank on Dec/2017 at KCG college of Technology and got third place.

9. Nishanth,Revanth had participated in Coding Competition Hack-Rank on Dec/2017 at KCG College of Technology and got First place.

10. Roshan Shahul,Sarikka,Rajeev,Manoh,Bharath,Josh,Yuvaraj P had participated in IoT training program Intel IoT training Program on 19,22-12-17 at KCG College of Technology.

11. M.Sathish,J .Ragul,A. Mullaivanraj, A Ganesh, A. Sivakumar had attended the Workshop on RUST Programming Language on 10.2.18 at CSE Lab1,KCG College of Technology.

12. Students attended workshop on Ethical Hacking on 9,10.2.18 at CSE Lab1,KCG College of Technology.

13. Sheveda, Visudha, Aswhwini had participated in Creative Colors Event organized by KCG Women's Coding Club at KCG College of Technology and got Prize in the event.

14. Hussain Sabbir, Roshan Shahul, Josh Sathyajith, Sudharshaun, Praveen Raj, Nishanth K R , Arun Pandi had participated in #inc Hackathon organized by Programming Club at KCG College of Technology on Feb 2018.

2. Events attended by faculty members:

REPORT ON THREE DAYS FDP ON PYTHON PROGRAMMING

Ms. A. Anju, Assistant Professor, Information Technology attended three days FDP on Python Programming from 14-06-17 to 16-06-17 at Sri Sai Ram Engineering College, Chennai in association with ISTE Chapter. The Course started with the formal Inauguration by the Principal, Sri Sai Ram Engineering College - Dr. C V Rajkumar and Head of the Department Dr.T.Sheela.. The Resource Persons Ms Suganya and Mr Balaji took over the session for all the three days. The various sessions gave insight knowledge about the Python Programming. Ms Suganya started the session with the basics of Programming concepts and moved to basics of Python. The entire session was full of Hands on training. The post lunch session was handled by Mr. Balaji, and he discussed the importance of Control Structures in Python Programming.

Ms. A. Anju, Assistant Professor – IT – receiving certificate from chief guest

REPORT ON FDP ON DATA SCIENCE AND BIG DATA ANALYTICS

Ms.R.N. Sharmila Fradlay & Mr.N.Bhaskar, Assistant Professors, Department of Information Technology attended this Five Days FDP on Data Science & Big Data Analytics at Sri. Sairam Institute of Technology, Chennai from 19.06.17 to 23.06.17.

In those five days, elaborative description on Bigdata, R-studio, ORACLE 11g and so on. There were special practical session focusing on advanced analytics. In this topic they discussed about data mining algorithms such as K-means Clustering algorithm in which the participants got an idea about the library functions to be added for this algorithm, how to add iris dataset, row and column function and how to display count for the particular data , Apriori algorithm in which association rule mining, read the transactional data that is read the data into R-studio, inspect the transaction data, find rules and subrules, Linear Regression, and logistic Regression were discussed and then decision tree in which how to convert the vector value, plot the graph for respective values, how to add rows and coloums, how to add tables, how to use training dataset and how to calculate the values.

Domain Covered: Data Science and Big data Analytics

Ms. Sharmila & N. Bhaskar attending the Data Science & Big Data Analytics Workshop

Report on Faculty Induction Programme

Dr. R. Anand, Associate Professor, Ms. M.V. Krithikaa Venket, Assistant Professor and Ms. Tina Susan Thomas, Assistant Professor - Department of Information Technology attended this three days FDP on Faculty Induction Programme Conducted by KCG College of Technology at KCG Campus from 21-06-17 to 23-06-17.

The programme started with inaugural function and Dr. G. Prabhakaran, Principal, KCG College of Technology welcomed all the newly joined faculties and gave an overview of the induction programme. The sessions were about Principles of learning, Instructional Planning, IQAC and ISO, Adolescent characteristics and Student motivation, Classroom Communication and student evaluation. The HR manager conducted a special session on the HR policy of KCG College of Technology.


Group Photo – KCG Induction Program

Report On Recent Trends In Data Science Faculty Development Programme

Mr. R. Sampath, Assistant Professor, Department of Information Technology attended the two days workshop on Recent Trends in Data Science Faculty Development Programme at RMD Engineering College from 23.06.17 to 24.06.17.

The session started with open data science and the forth coming technology changes in the mobile application development and the upcoming technology of chat bots which will reach the artificial intelligence growth. The programme also gave an introduction about the tools and techniques in data science, Apache spark session gave an experience in working with machine learning environment. The concept of deep learning was also covered in the programme. Resource persons from IBM,VirtusaPolaris and Purpleslate addressed the partcipants, As a whole the FDP was verymuch informative in the field of Deep learning Aritifical intelligence and Machine learning.
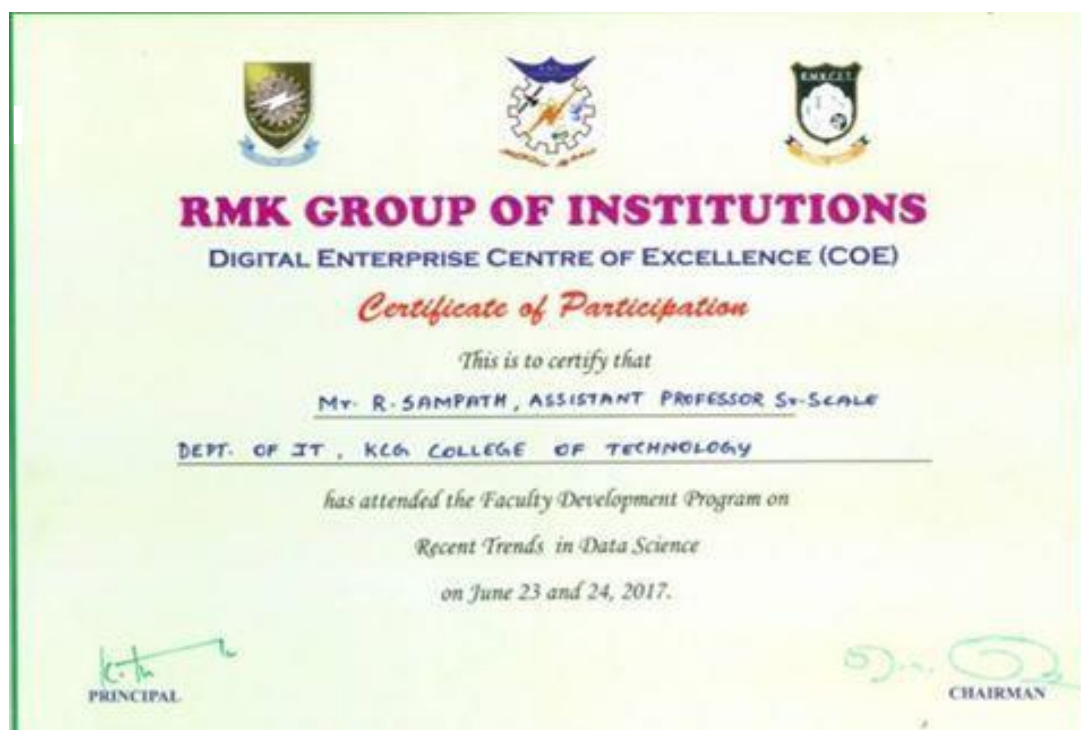
Certificate – Mr. R. Sampath – Recent Trends in Data Science

__Report on Internal Quality Assurance Cell (IQAC) Training Program__

Mr. M. Baskar Manickam, Assistant Professor - Sel. Grade, Ms. A. Anju, Assistant Professor and Mr. K.T Naveen, 3rd Year - Information Technology Department attended the two days training program on "Management of Quality Circles for Effectiveness of Educational Institutions" at KCG College of Technology, Chennai on 22-06-017 & 23-06-17.

IQAC program was a two days program where a group of well trained people took sessions on the importance of maintaining quality in whatever field we are. Along with this interactive session some tasks were given which was really interesting.

The Programme was inaugurated by Dr. G. Prabhakaran, Principal, KCG College of Technology. A group of school students from SRM NIGHTINGALE presented a project which specifies on the factors that can be improved by quality. Mr T R Narasimhangave more information about Quality Circles,working methodology based on PDCA Cycle, organizational structure, Role and Responsibilities and Benefits of quality circle.


Group Photo of Internal Quality Assurance Cell (IQAC) Training Program

Report on Peer Enabled Programme

Ms. R. Adline Freeda, Assistant Professor - Sel. Grade, Mr. N. Bhaskar, Assistant Professor - Sen. Grade & Ms. Tina Susan Thomas, Assistant Professor - Sen. Grade attended the Infosys Peer Enabled Programme at KCG College of Technology on 8th July 2017. The resource person, Mr. M. Balaji shared the importance of Python programming and the staffs were able to understand the importance of making the students to do programming on their own. The entire programme was very useful to the staffs for planning the programming courses for this academic year.

**Group Photo - Peer Enabled Programme**
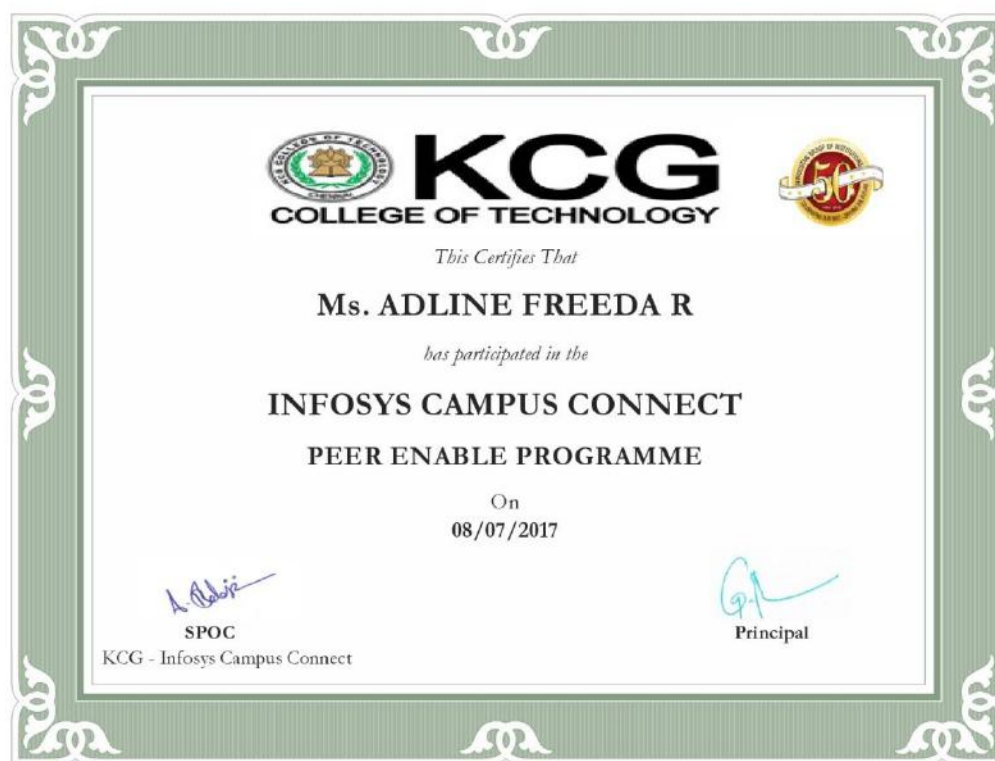
Ms. R. Adline Freeda - Peer Enabled Programme Online Certificate

Report on Inauguration of the 6th International Young Scholars Workshop

Mr. Sreekantha Kumar. V.P., Associate Professor & Mr. M. BaskarManickam, Assistant Professor - Sel.Grade, KCG College of Technology attended the inauguration of the 6th International Young Scholars Workshop (12th to 14th July 2017) & Dr. KCG Verghese Centre for Higher Education, Leadership & Management (HELM) on 12th July 2017 at 10A.M. at Good Shepherd Hall, HITS, Padur Campus.

The speakers provided an inspiring speech tracing back to the history of higher education in India and how it was pioneered in education around the world. As Prof. VedPrakash stressed, institutional education must be interestingly informative, involving and engaging and should stir up the core values in the students through alternate models that are suitable for Indians rather than those inspired by foreign

systems. Students must be instilled with practical knowledge revolving around the concerns, issues and needs of the society. This will lead to a better tomorrow through a perfect society that will be established by the young minds of India. Thanks and congrats to ASPA and HELM Centre for arranging such a magnificent workshop.
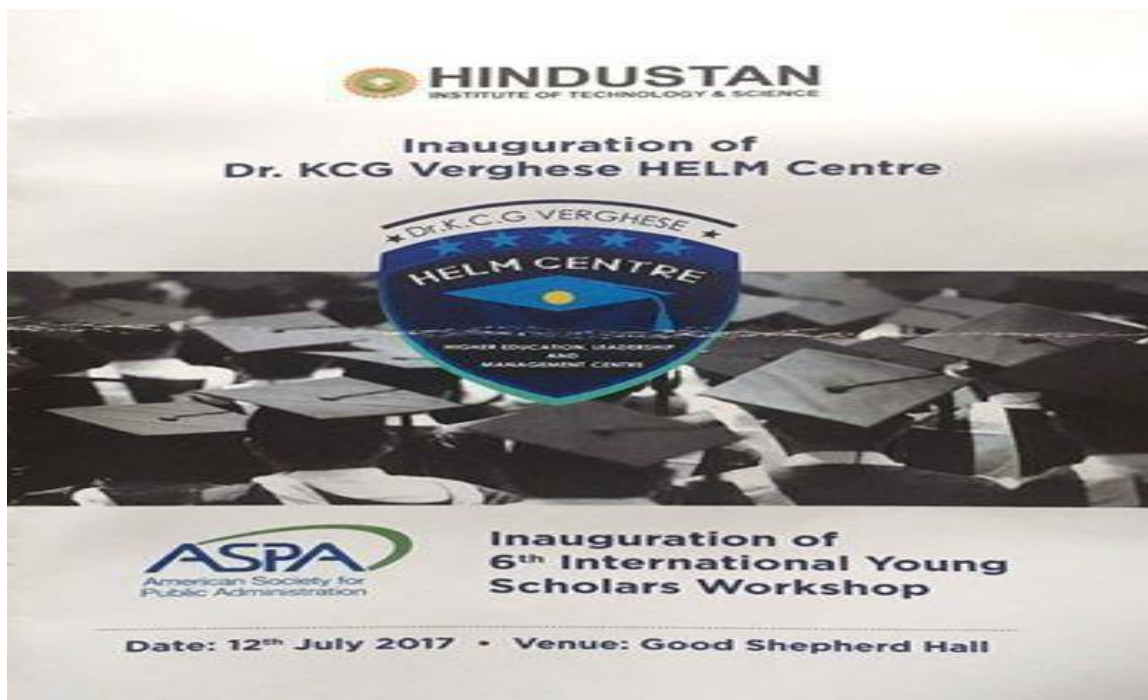

Banner – Inauguration of 6th International Young Scholars Workshop

Report on AWS Educate Day 2017

Dr. J. Frank Vijay, Professor &HoD-IT attended one day workshop "AWS Educate Day 2017" organized by ICT academy in partnership with Amazon Web Services on 13th July 2017 at Radisson Blu GRT, GST Road, St. Thomas Mount, Chennai. The Workshop dealt with the AWS Educate which gives access to students to free online learning about Amazon Web Services. The workshop started with the registration process followed by the welcome address by B. Anbuthambi, Vice President, ICT Academy.

The key note speaker, Mr. VikramManchanda, Head – India Public Sector, Amazon Internet Services Pvt Ltd explained about the various Internet services provided by Amazon. Mr. Samuel Harris, AWS Educate Program Manager, APAC, AWS handled two

sessions and explained about the AWS Educate online program & how to teach AWS technology to students. Mr. Ravi Shankar, Chief Technology Officer, Techminfy handled three sessions and explained about the core elements of AWS technology and also explained about how to deploy applications onto AWS. This workshop gave awareness about AWS technology and how to teach AWS technology to students.
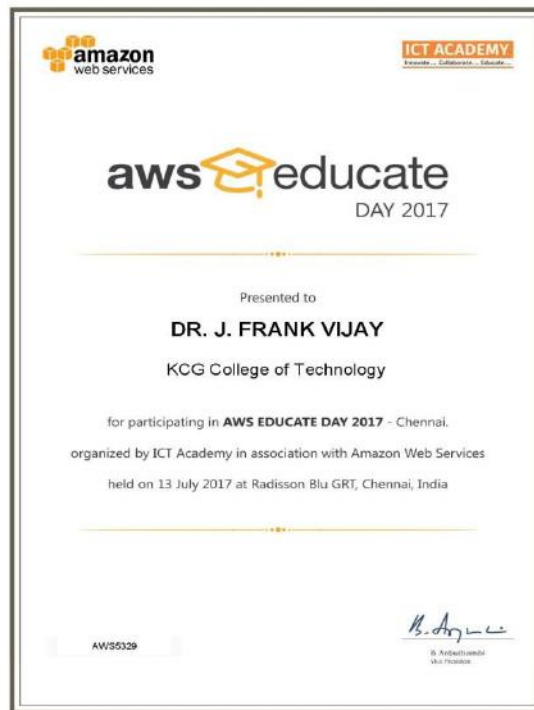
AWS Educate Day 2017 Participation Certificate of Dr. J. Frank Vijay

Report on "Saleforce Academic Directors Meeting"

Dr. J. Frank Vijay, Professor &HoD-IT attended Salesforce Academic Directors Meet 2017 organized by ICT academy in partnership with Salesforce on 25th July 2017 at Radisson Blu GRT, GST Road, St. Thomas Mount, Chennai.

The Meeting gave a clear picture about the benefits of Salesforce Academic alliance for students, faculty member and Institution.

For Students – Salesforce University Curriculums, Online Community, Student Ambassador Program, Contests & Competitions, Discounted Salesforce Professional Certification.

For Faculty Member - Instructor Led Faculty Development Programs, Courseware, Online Community, Discounted Salesforce Professional Certification, Salesforce Certified Academic Instructor Recognition, Regular update session, with opportunity to connect with regional Saleforce MVP's.

For Institutions - Branding Opportunity, Authorized Curriculum, Opportunity for Faculty members and students to participate in programs, events and initiatives at Salesforce.

Sale Force Academic Directors Meeting

<u>Report - "Introduction to Internet of Things"</u>

Ms. R. Adline Freeda, Assistant Professor – Sel. Grade, Information Technology Department attended two Day Faculty Development Program on "Introduction to Internet Of Things" at Jerusalem College of Engineering, Chennai on 26th & 27th July 2017.

Anyone who says that the Internet has fundamentally changed society may be right, but at the same time, the greatest transformation actually still lies ahead of us. Several new technologies are now converging in a way that means the Internet is on the brink of a substantial expansion as objects large and small get connected and assume their own web identity. Following on from the Internet of computers, when our servers and personal computers were connected to a global network, and the Internet of mobile telephones, when it was the turn of telephones and other mobile units, the next phase of development is the Internet of things, when more or less anything will be connected

and managed in the virtual world. This revolution will be the Net's largest enlargement ever and will have sweeping effects on every industry — and all of our everyday lives. In short, the session was very informative.

Group Photo – Participants Attending one Day Faculty Development Program in Introduction to Internet of Things

Report on Technical Discussion about Computational Design for Energy Application

Dr. R. Rajkumar, Associate Professor, Department of Information Technology participated in the discussion about "Talk on Computational Design for Energy Application" held on 8th August 2017 at KCG College of Technology, Chennai. Dr. Rajeev Ahuja, Professor, Uppsala University, Swedan, delivered lecture on Green Energy and Computation Design. He discussed about various research activities and possible joint collaborations.

Technical Discussion about Computational Design for Energy Application

<u>Report on Artificial Intelligence in IOT</u>

Ms. V.S.KrithikaaVenket , Assistant Professor , attended workshop on Artificial Intelligence in IOT in SSN college of Engineering at 09-09-2017. The resource person Mr. Iliyas (working in ATSENSE Solutions) covered the topics on Data Analytics, and importance and growth of Artificial intelligence. Then he explained some concepts in artificial intelligence which is a must move beyond statistical correlations to make the most of the Internet of Things. He clearly explained the differences in AI and IOT.

Workshop on Artificial Intelligence in IOT

Report on faculty development programme organized for pals in IIT

Ms. V.S.Krithikaa Venket & Mr.N.Bhaskar, Assistant Professors, Department of Information Technology attended three days FDP in IITM organized for PALS, Chennai from 01.11.17 to 03.11.17. The session was entirely on how to use new technologies in teaching and how to make teaching – learning process more effective.

Report on"Predictive Analysis and Data Mining Using R"

Mr.M.Baskar, Assistant Professor-Selection Grade, Department of Information Technology, attended this Two Days Workshop at Saveetha University, Chennai on 10th and 11th November,2017.The Programme was inaugurated by Mr. Parthasarathy P, Leadership –Advanced Analytics, Indian Institute of Management, Calcutta and he delivered an excellent speech on Predictive Data Analysis with real time example.

Mr.Siddarth S, Associate Principal-Analytics, Indian School of Business, Hyderabadgave hands-on training on data exploration, Data Visualization and Data Ming Skills.

Mr. Abbhishek, Advisor Advanced Analytics, University of Warwick, UK has given hands-on Training on Regression Tree and Cluster Analysis.

Mr. Vighneswaran K., Financial Analyst, PSG, Coimbatore gave brief description about R Programming with syntactic and Semantics Structure. Also, he gave the demo of various projects that are launched for the past 1 year in various Data Mining Environment.

Certificate Distribution – Predictive Analysis & Data Mining Using R

Report on QIP Sponsored Short Term Course on Security Issues and Testing Challenges in Hybrid IT Infrastructure with Cloud Computing and Artificial Intelligence

Mr. Sreekantha Kumar V.P., Associate Professor, Dept of IT and Dr. R. Anand, Associate Professor, Dept of IT attended the **Five Days Short Term Course on Security Issues and Testing Challenges in Hybrid IT Infrastructure with Cloud**

Computing and Artificial Intelligence, organised by Department of Computer Science and Engineering, Pondicherry Engineering College, Puducherry on 13.11.2017 to 17.11.2017. The programme had special sessions on "Dynamic System and Model" by Dr. R. Subramanian, Professor, Dept of CSE, Pondicherry University, "Architecture Perspective of Hybrid Infrastructure" by Dr. G. Zayaraz, Professor, Dept of CSE,Pondicherry Engineering College, Security Issues in Virtual Machine" by Dr. K. Vivekanandan, Professor, Dept of CSE,Pondicherry Engineering College, "Containers and Infrastructure Automation for Components Cloud" by Mr.Srinivasan T., Founder & CEO,Glosys Tech Solutions P. Ltd and "Security Threads in Cloud Environment" by Mr.KiasHanifaCTO, Fonicom Ltd

Report On Seven Days FDP On CS6659 – Artificial Intelligence

Ms. V.S. KrithikaaVenketattended the Seven Days Faculty Development Programme on **ARTIFICIAL INTELLIGENCE**, organised by Anna UNIVERSITY at RMK COLLEGE OF ENGINEERING AND TECHNOLOGY, Puduvoyal on 05.12.2017 to 12.12.2017. It covered   all the topics of the sixth semester course CS6659 – ARTIFICIAL INTELLIGENCE

Group Photo - SEVEN DAYS FTDP ON CS6659 – ARTIFICIAL INTELLIGENCE

Report On 5-F's Faculty Empowerment Program

Ms. V.S. KrithikaaVenket attended the 5-F's Faculty Empowerment Program conducted in Hindustan International school, Guindy on 11th December,2017. The programme started with an introduction about Hindustan Group by Dr. Ramachandran S, VC, HITS. Dr Sambandan G - Advisor-Electrical Sciences, KCG College of Technology handled a session on "Nine characteristics of a great teacher". Dr Anand Jacob Verghese –Director and CEO, HGI explained the vision and mission of HGI and thestrategies that are following in the institution. He gave an overview on what we have toachieve in 2020 and what are the goals to achieve in 2024.The session was very interesting inknowing many new things that are happening inside the institution.

International Gaming, Animation and Infotainment Exhibition and Conference India Gaming Show – South 2018

IGS – South 2018 - The three - day International Exhibition and Conference - covered areas like, Games Display, Technology Showcase by large companies; Animation; Gamification; Mobile Gaming Zones; Internet of Things; Start-ups; Skills & Skill Development; Digital India, Consumer Section, Cosplay, Competitions, Esports and stage events.

Some of the highlights of the event includes

E-sports Competition

- Play as Sachin Tendulkar in his virtual game "Sachin Saga" and win over One Lakh Rupees.
- A competition on old time favourite game Ludo, now on Mobile " Play Ludo King on Mobile at India Gaming Show 2018 and walk away with cool Cash prizes"
- Gaming and Experience Zones
- Virtual Reality Experience
- Wear your Passion – a Cosplay Competition

The Students have attended various conferences hosted in the India Gaming Show 2018. The main highlights of the conference are given below:-

- How far beyond is monetization in Digital gaming? Is India ever going to get there?
- What is the criterion for digital games to be esports or msports?
- What is digital gambling? and what are the boundaries between digital gaming and digital gambling?
- Case study based discussion by the panel on famous gaming activities.

The student participated in the various tournaments conducted in the Gaming show event like LUDO, ASPHALT & MINI MILITIA. The students also visited the VR & PC Booth and participated in the various games which includes VR Experience – Spiderman, Until Dawn Rush Of Blood, VR worlds : London Heist, VR Experience – Everest, RIGS, Farpoint - with Aim Controller, SKYRIM - Nov 17th Game Release, PC booth: CS:GO, DOTA 2, Road Redemption & Shadow of war.

Students participating in the competition Exhibition Centre – India Gaming Show 2018

Visiting Team – (L-R) Mr. Hussain, Dr. J. Frank Vijay, Nishanth & Keshav

Report on Bridge 2018 Conference

Dr.J.Frank Vijay, attended Bridge 2018 conference on 28th March 2018 at ITC Grand Chola, Chennai.Bridge conference 2018, a unique initiative of ICT Academy aims to bridge the industry – academia gap. The theme of the conference was "The Future of Work". Bridge is a platform for all the stakeholders to discuss on improving the industry-institute interaction primarily on the key issues that includes the role of technology, innovation, applied research, entrepreneurship, future virtual world, curriculum change, industry expectations, skill development etc. It is an opportunity for both industrialists and academicians to share their thoughts, ideas and ways for preparing academic campuses to deliver high value industry relevant output.

Bridge has become a platform for Schools, Colleges, Corporate&Govt to develop the next generation professionals of our country together. This conference is supported by Government of Tamil Nadu. Started in the year 2011, the conference has been receiving an overwhelming response from all the stakeholders of the knowledge ecosystem.

The conference was inaugurated by the powerful speakers from various areas. Mr.Lakshmi Narayanan, Chairman, ICT Academy and Emeritus Vice Chairman, Cognizant, Dr.B.Chandramohan IAS, Secretary to Government, IT Department, Government of Tamil Nadu, Prof. Bhaskar Ramamurthi, Director, IIT - M, Mr.KrishnakumarNatrajan, Executive Chairman, Mindtree, Dr.N.Saravana Kumar IAS, Joint Secretary, MHRD, Government of India and Dr.M.P.Poonia, Vice Chairman, AICTE.

Two special Master class sessions were organized for the delegates.

1. A Master class was organized for registered delegated about the rise of Artificial Intelligence and Deep Learning by Dr.MiteshKhapra from IITM (CSE) &Mr.MageshSrinivasan, Global Head - connected Car and Deep Learning from HCL Technologies.
2. Second session was organized on unwilling Workforce for the Fourth Industrial Revolution by Dr.MuraliPadmanabhan, Sr. Vice President and India Head - Talent Management, Virtusa, Mr.VasudevanRajagopalan, Head - Talent

Acquisition(India), TCS, Ms.JayanthiVaidyanathan, Director - HR, PayPal India and Mr.V.Chokkalingam, CEO and MD, Vee Technologies.

The conference ended up with the motivational session handled by Mr.Braj Mohan Das, Monk & Motivational speaker.

Group photo – Bridge 2018 Conference - ICTACT

Online Certification Courses:

1. The faculty members Ms. R. Adline Freeda, Mr. M. Baskar, Mr. N. Bhaskar, Ms. Tina Susan Thomas , Ms. Anju A, Ms. Krithikaa Venket and Ms. Divya S completed an online certification course on Python programming conducted by Hindustan university from 1st to 31st December,2017. The course mainly had a comprehensive outlook and effectively covered most of the key concepts in Python programming underscoring the importance of robust fundamentals.

2. The faculty members Ms. R. Adline Freeda, Mr. N. Bhaskar and Ms. Anju A completed an online certification course on FDP201x (Two Week (August – October 2017)AICTE FDP on Pedagogy for Online and Blended Teaching-

Learning Process) conducted by IIT Bombay under MHRD, Govt. of India. It was conducted at two levels. As these participants completed the first level of FDP101x - "Foundation Program in ICT for Education: Online/ Loyola- ICAM, IIT Bombay under PMMMNMTT, MHRD, Govt. of India from 03.08.17 to 30.08.17 successfully, the second level FDP201x - "Pedagogy for Online and Blended Teaching-Learning Process" got started from 14.09.17 and went upto 12.10.17 . Both the levels were completed successfully by our faculty members.

3. Events co-ordinated by faculty members:

Report on Cadaver Transplant Programme Supported by KCG College of Technology and Government of India

Mr. R. Sampath, Assistant Professor, KCG College of Technology organized an awareness program on "Cadaver Transplant Programme – Government of Tamil Nadu" supported by KCG College of Technology and Government of Tamil Nadu on 6th July 2017.The awareness program was very useful to the students. Dr. SenthilKumar, Stanley Hospital gave a presentation about the importance of Organ donation.

Cadaver Transplant Program – Chief Guests

Report on One Day CSI Sponsored Workshop "Writing Scientific Research Papers" held on 10.07.2017

Dr.R.Rajkumar, Associate Professor, Department of Information Technology & Mr. R.Sampath, Assistant Professor, Sen.Grade, Department of Information Technology co-ordinated this one Day Research Workshop.

Two days research training workshop focuses on creating research awareness among the graduate students, research scholars and young faculties to produce high quality research work and publications during the academic research activity. Communication of research findings in peer-reviewed journals is the standard by which researchers and their findings are evaluated by the scientific community. There is consistent demand on academicians to produce good quality research papers. This demand is institutionalized in the requirements laid down by the various research bodies to manage research in the educational institutions. Keeping this demand in mind, the objective of this workshop is to unpack what constitutes a great research paper and outline the pleasures and pitfalls of writing it. With the help of some characteristic examples and activities, the workshop will serve as a practical guide to the art of writing scientific papers and developing research awareness on emerging technologies. This workshop seeks to boost publication in international peer-reviewed journals by the students, faculties and researchers of KCG College of Technology.

One day CSI Sponsored Workshop - Writing Scientific Research Papers

<u>A Report On CSI SPONSORED ONE DAY WORKSHOP ON ADVANCED PHOTOSHOP AND DREAMWEAVER</u>

DATE: 24.11.2017   VENUE: STEVE JOBS LAB

RESOURCE PERSON: Mr. T. RAJENDRAN, ASSISTANT PROFESSOR – COMPUTER SCIENCE ENGINEERING, GRT INSTITUTE OF ENGINEERING AND TECHNOLOGY

Photoshop is a tool which has taken pivotal position in everyone's life nowadays. A fair bit of knowledge about the software is quintessential. The department of Information Technology, has taken the pioneering step in conducting a programme on the Photoshop which will enable the attendees to address different issues ranging from photo editing to brochure designing.

The program started with the inaugural function at 9.00 A.M Dr. SumathiPoobal, Vice Principal, KCG College of Technology was the chief guest. She appreciated the Department for organizing such a workshop, which was indeed the need of the hour.

The Head of Department, Dr. J. Frank Vijay underscored on the importance of such a programme and suggested that the idea for such a workshop came from the dependency the faculty members are showing on the students even for simplest editing jobs like designing brochures and other related items for departmental programmes and activities. He insisted the resource person to conduct the workshop in such a way where hands on experience is imparted, and inevitably after the completion of the workshop, all the faculty members who have attended the programme should be able to design a brochure by themselves.

The training session started by 9:30 A.M. Mr. Rajendran, an expert in Photoshop and Dreamweaver, and having years of vital experience set the ball rolling. His technical know-how and software prowess impressed the attendees and evidently underscored the fact in ever one's mind that he is the right person to lead the workshop. The Photoshop section was covered in the morning session and was followed by the session on Dreamweaver in the afternoon.

Inauguration function

Training session

Technical Encounters

KCG HASHN'HACK

Hackathon combines the terms "hacking" and "marathon" and implies an intense, uninterrupted, period of programming. More specifically, a Hackathon is a highly engaging, continuous event in which people in small groups produce a working software prototype in a limited amount of time. KCG Hash N' Hack was a 24 hours Hackathon organized by the 'Hashinc' Programming club of KCG College of Technology on 24th and 25th February 2018. 25 teams (Total 66 participants) from 8 colleges participated in the event hacking some real problems

Also mentors from few cool start-ups and successful companies in Chennai spent the weekend in KCG that created an excellent environment for the students to learn a lot about how to build products. There was an Icebreaking session planned that helped participants to interact with each other. Every participant was given a plain sticker in which they wrote a tagline about themselves. Later they went around reading the taglines of others. At the end of the session few participants shared the coolest taglines they had come across. Also, to add more fun and competitive spirit to the event a whistle was given to all teams which they would blew after completing each benchmark.

The event started with the inaugural function at 9.30 am on 24.02.18 (Saturday).Mr. Dorai Thodla briefed the rules and regulations of the Hackathon. The Coding Timer started running at 10.00 am when principal hit the 'enter' key. **Two teams from the IT department under the leadership of Nishanth and Roshan displayed stellar performance in the programme.**

Principal- Dr. G. Prabhakaran – inaugurating the KCG HASHN'HACK Program

Information Technology Students Participating in the KCG HASHN'HACK Program

Information Technology Staff Team Visited the Event and Encouraged the Students to participate actively in the KCG HASHN'HACK Program

Report on Hitsathon V1.0 (Hackathon)

The students of Information Technology (Maria RashmiFernando.M., DivyaPriya.V., Deepak., Amreen.S., Nivya, Uvashree, Naveen.K.T., Keshav& Joseph) attended Hitsathon V1.0 (Hackathon) at HITS Padur campus ,Hindustan University on August 4th 2017. This programming contest was challenging because the competition lasts for 24 hours (non-stop programming). Many students came from various universities and colleges to participate in this contest. It was a great learning experience for the students to compete with other University students.

Hitsathon V1.0 conducted at Hindustan University

Information Technology Students Participating at Hitsathon V1.0

Report - HACK4Throne Competition

The Students of pre-final year(Mr.SivaBalaji.U.,Mr.Praveen.R., Ms.Uvashri.D. and Ms.Nivya.P) under the guidance of Mr. M. Baskar Assistant Professor – IT andfinal year (Ms.Prithika.P., Ms.Sruthi. S.,Ms.Mahalakshmi. K and Ms.Logeshwari.P) under the guidance of Dr.Anand R, Assosiate Professor – IT of Information Technology department participated in the National Level HACK4Throne Competition Conducted by the Department of Information Technology in Association with Computer Society of India atRajalakshmi Engineering CollegeThandalam on 26th & 27th August 2017.Out of the 254 students participated from various institutions the batch of pre-final year students was selected as one among the top 10 teams.

Students of Information Technology participating in Hack4Throne competition

Report on MockVita - TCS Coding Competition

The Students of Information Technology registered for TCS Codevita Competition. TCS conducted MockVita Competition for the registered students on 7th July 2017. Around 34 students attended the competition. In the Mock Competition the students were asked to solve eight problems and they were given 6 hours to complete the task. The students worked hard to complete the task. After utilizing six hours continuously, 5 projects were accepted for 7 students, 4 projects were accepted for 10 students, 3

projects were accepted for 13 students, 2 projects were accepted for 5 students. Overall, it was a great learning experience for the students to do coding continuously for six hours.
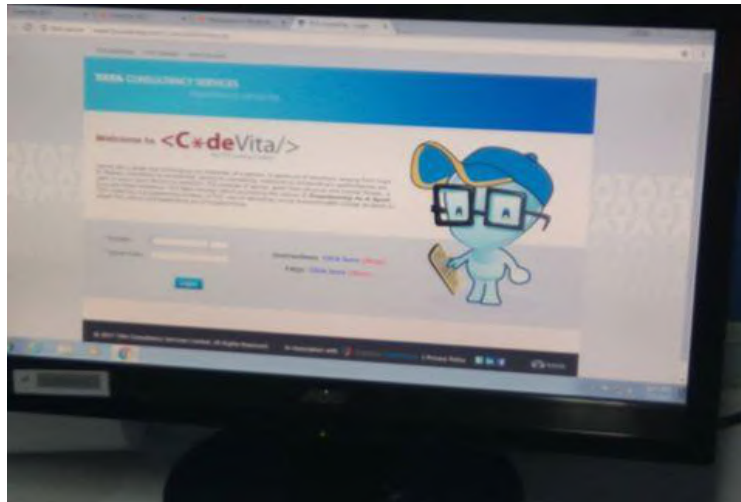
Students participating in TCS coding competition

Trailhead Student's Championship-2018(Learnathon) Report

Staff Co-ordinator: 1. Mr. M. Baskar, AP-Selection Grade/IT
Student Co-ordinator: Ms. Srinidhi Srinivasan, III year/IT
Date of event: 2nd and 3rd Feb. 2018
Number of participants: 100
Sponsoring organization: ICT academy in partnership with Sales Force

EVENT SUMMARY

The "Trailhead students championship-2018" organized by the ICT academy offered an exclusive 24hour learning of modules, comprising of advanced technology topics including soft skills, business, developer, and self development topics, thus enabling the students to apply them as soon as possible. This created an environment for learning that is speeding up comprehension and application to levels that aren't seen elsewhere.

On Feb 2nd,the inaugural session of the "Trailhead students championship-2018"took place at 10.30 A.M in the presence of several dignitaries including our honourable chief guest -Ms.Poonkuzhalie, our respected principal- Dr.G.Prabhakaran, HOD of Department of Computer science and Engineering department -Dr.M Krishnamurthy and HOD of Department of Information technology - Dr.J Frank Vijay. The session took place in Mirza hall and approximately 100 participants were attended.

The session took place with the HOD of department of Computer science and Engineering welcoming the gathering. Next, the felicitation took place where our respected principal felicitated the participants and welcomed the chief guest. Later, our honourable chief guest Ms.poonkuzhalie provided some wonderful suggestions for the participants. Finally the HOD of department of Information technology shared his thoughts on the events and gave some valuable advice. Mr. M. Baskar Assistant Professor coordinates the entire event from Department of Information Technology. Totally 100 students were participated from Department of Information Technology 23 Students were participated. The inaugural session came to an end with a small video clipping on the Learnathon.

The participants headed to their respective laboratories and started with their 24 hour contest at 12.00 pm. The contestants participated with much enthusiasm and worked towards achieving the maximum number of badges and points in the contest. The contest finally ended at 12.00 P.M. on 3rd Feb 2018. followed by the distribution of certificates.

Inauguration photos

Information Technology Students Participating in the Learnathon Program

Report on Hour of Code

Dec 04-09, 2017

Overview:

The Hour of Code began as a one-hour coding challenge to give students a fun- filled introduction to computer science and has become a global learning, celebration, and awareness event. It takes place every year during Computer Science Education Week, the first week in December (4th to 10th). With such a huge groundswell of support and attention, it's an ideal time for schools and districts to put the spotlight on computer science programs and expand opportunities. The Hour of Code is at its core not about learning a brand new skill in just one hour. One hour isn't enough to learn how to code. It's about increasing access to computer science by breaking stereotypes and opening doors. Somebody may learn programming concepts like loops, conditionals, or basic debugging through the Hour of Code. But a much more important goal is for students and teachers to learn that computer science is fun.

As a part of social outreach programme, KCG College of Technology had organized the Hour of Code in 11 schools around in Chennai. A team of 8 Faculty from CSE and IT departments along with 15 student volunteers from various departments conducted the programme from Dec 4th to 10th. Around 299 students from 11 schools (13 batches) participated in the programme. They practiced Blockly and Minecraft in one hour.

Programme Objectives:

● Introduce school children to computer science in an interesting way.
● Helps to improve the computational thinking skills in an approachable way.
Students will identify the pros and cons of self-directed learning as it relates to learning code.

Participants: A set of 15-30 students of grade 7 and above can participate in a session.

Feedback from School:

The overall feedback for the programme was very positive. Students enjoyed doing coding in one your. Some of the feedbacks from schools were video recorded. Sample feedbacks are given below.

Students:
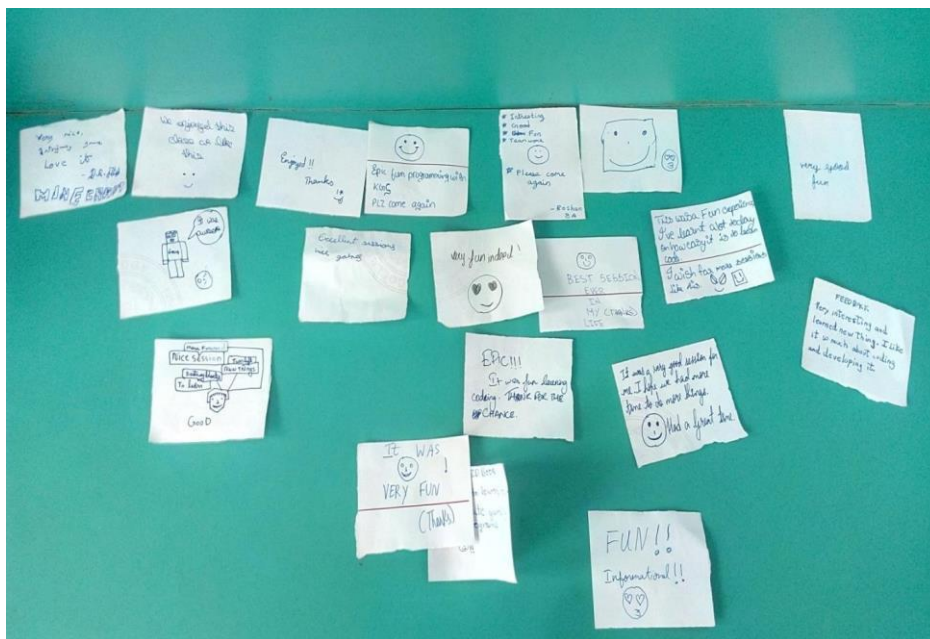
Sample Feedbacks Received from Various Schools

Faculty: HLC International School

Faculty: Don Bosco Excellence

Volunteers Feedback

The volunteers of Hour of Code shared their experiences and what they have learned is compiled and given below:
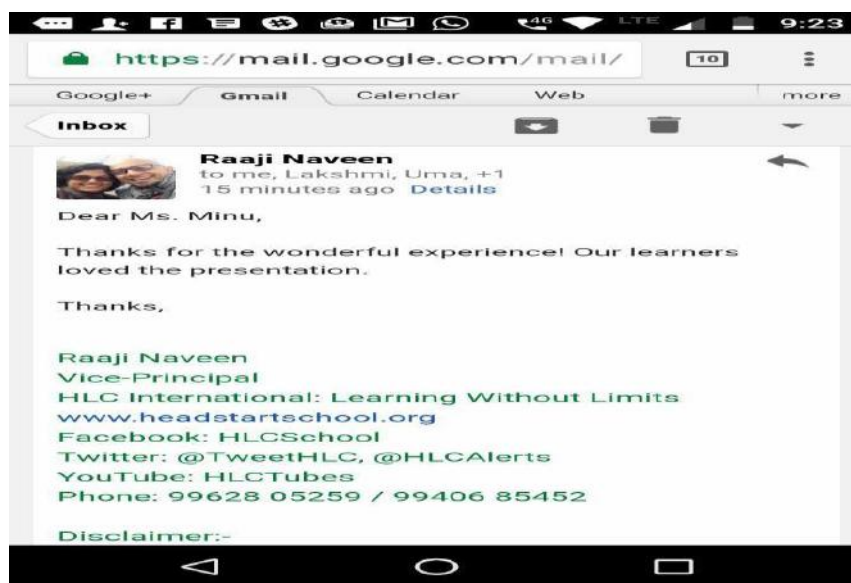
Dorai Thodla, Our mentor

1. Realized that kids do not need to be taught to build things and solve problems. I saw the difference between the performance of students who were assisted by teachers and who were not. Most of the time students who were allowed to explore on their own (and with their friends) did much better.

2. Working in groups is one of the best ways to explore and learn. In almost all the 4 schools I went to, I saw this happen.

3. If you give interesting, creative challenges, you can keep even very restless kids engaged.

Arunkumar, II year ,ECE

I understood that I can do more than what I thought.I usually don't speak much to strangers but through this I learned how to mingle with everyone, even strangers.I got many new friends ,met new faculties and had an awesome experience with them.I am very much interested to do such activities in future. And I also realized kids now are more brilliant than us so we have to learn more than now.

Daniel,II year student,EEE

I have not guided anyone on anything,but I did it through Hoc. This is my first team work for a week and it was a great experience! I gained people from other departments including teachers. I am very proud to be a HOC'ian.

Krithika,Assistant professor, IT

1. This takes me to my school memories, where they teach me these types of activities.(my generation missed it).
2. This was an awesome experience where i learnt a lot from our students. Throughout they were very energetic. Their leadership qualities are excellent, the way how they answer, how they treat each kid is something to be appreciated.

Jonadab Theodore,II year,ECE

Going back to my old school to volunteer was the best thing ever. My old teachers were more than ecstatic. Furthermore I met such brilliant kids, who were casually completing their works and having fun too. And whenever I had a conversation with them about coding or computers, their knowledge about general computer science is enormous. And most of all people actually thought I was an actual professor for my height and I felt accomplished more than anything. I still have goosebumps when I see the kids having fun while working on the hour. All in all a brilliant experience and was a honor to be a part of the HOC team.

Ms. R. Adline Freeda,Assistant professor,IT

HOC has given me a great lessons. 1. Mingling in the society2. How to Organize an event outside the campus 3. The Dedication of our volunteers was commendable. The children were also amazing as they all started to explore the tools in their own way. We have to keep ourselves updated as these children are brilliant.

Sivakami, II year , AERO

Hoc event gave me

1. Confidence to open up to the young minds.
2. Taught me to tackle n think laterally, and use my logics.
3. participate in a event outside campus n to extend my limits to reach
4. wonderful vacation n memories for lyf tym

Ms. A. Anju, Assistant professor, IT

This is my first outside campus activity. I learned a lot by interacting with new people. The Kids are extraordinary, what we are learning today, they already knew. Some of them without teachers help started exploring themselves. Great experience. I am very proud being a part of HoC.

Photo Gallery – HoC

Hindustan International School, Karapakkam

San Academy,Velacherry

Gateway International School,ECR

HLC International,Thalambur

THE 2017 ACM ICPC CHENNAI PROVINCIAL PROGRAMMING CONTEST

KCG College of Technology hosted The 2017 ACM ICPC Chennai Provincial Programming Contest at Chennai, on 22 September 2017.

Organizers of ACM ICPC Chennai Provincial Programming Contest 2017:-

Contest Site Director – Mr. S Cloudin, Associate Professor, Dept. of CSE

Contest Coordinator - Dr.K.Poonkavithai, Associate Professor, Dept. of CSE

<u>Contest Coordinator – Mrs.R.Adline Freeda, Asst.Prof, Dept. of I.T.</u>

Contest Coordinator – Mrs.Minju.P.George, Asst.Prof, Dept. of CSE

The registration of contest started at 8.15 AM on 22/09/2017. The contestants are provided with the welcome kit.

The inaugural ceremony was Conducted at 9.30 AM. Dr. G Prabhakaran, Principal, KCG College of Technology delivered the presidential address and Dr. Sumathi Poobal, Vice Principal, KCG College of Technology delivered the felicitation address. Mr.Dorai Thodla, Founder imorph Inc was present as the Chief Guest and he delivered the inaugural address. Mr. John Deva Prasanna, Hindustan University

explained about the heritage and prestige of taking ACM contest and he explained the rules to the contestants. Dr. M Krishnamurthy, HoD – CSE and Dr. J Frank Vijay, HoD-IT were also present.

Following the inauguration a practice session was conducted with the Code Chef's tool and the technical issues were resolved. The contest was started by 11:45 and went till 2:45 PM without any slip.

There were totally 6 problems in the problem set. Every team is provided with the entire set of questions printed (6 Pages) along with the ICPC allowed 25 pages cookbook.

A brief valedictory ceremony was conducted and the cash awards for the winners are given away by Mr.Dorai Thodla in the presence of Principal and HoDs of CSE and IT.

Photo Gallery

Dignitaries on the dais

Principal Dr. G Prabhakaran delivering the presidential address

Vice Principal Dr. Sumathi Poobal, delivering the felicitation address
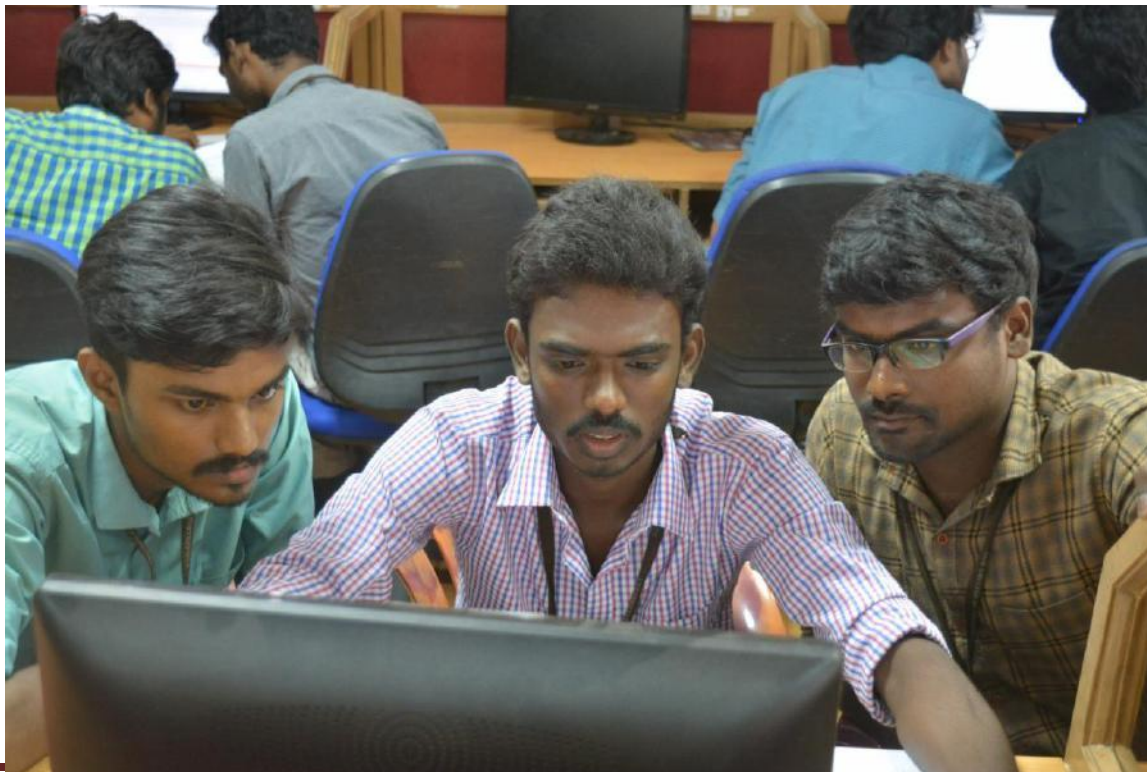
Chief Guest – Mr.Dorai Thodla, Founder imorph Inc

Contestants @ the arena of ICPC Chennai Provincial Contest
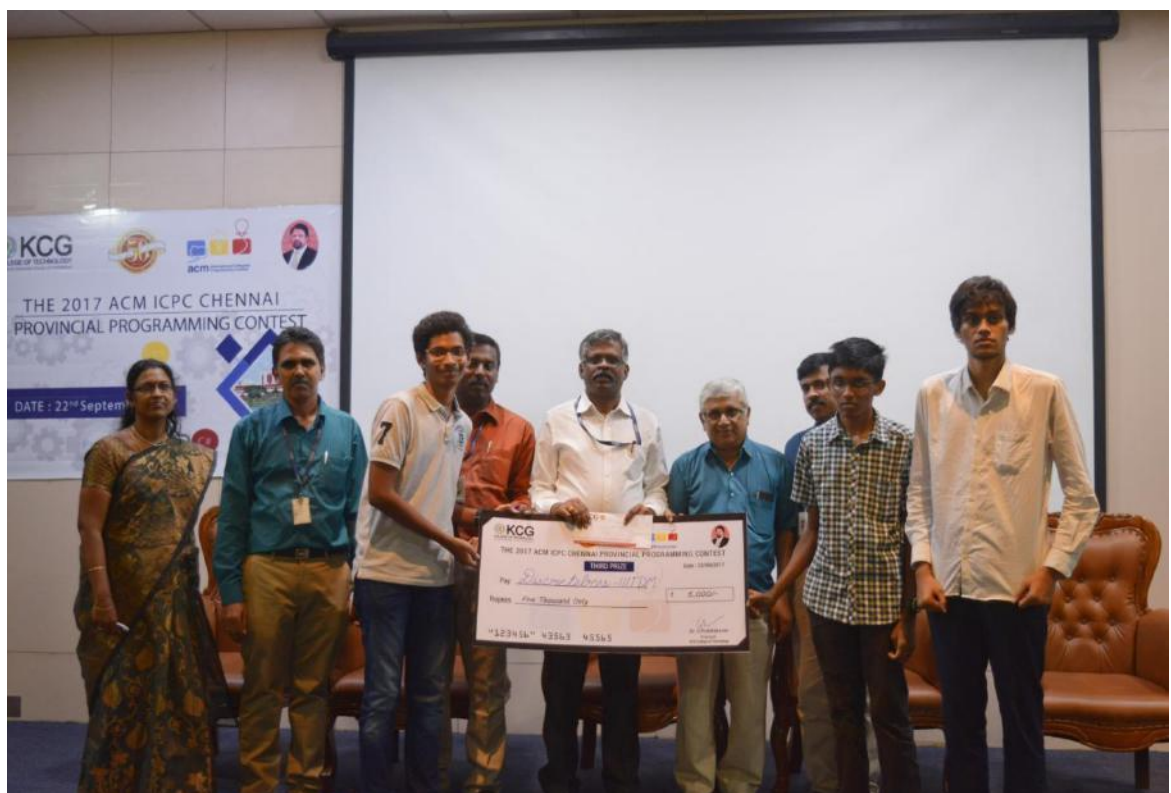
Team Work at progress

Winners of Chennai Provincial Contest 2017
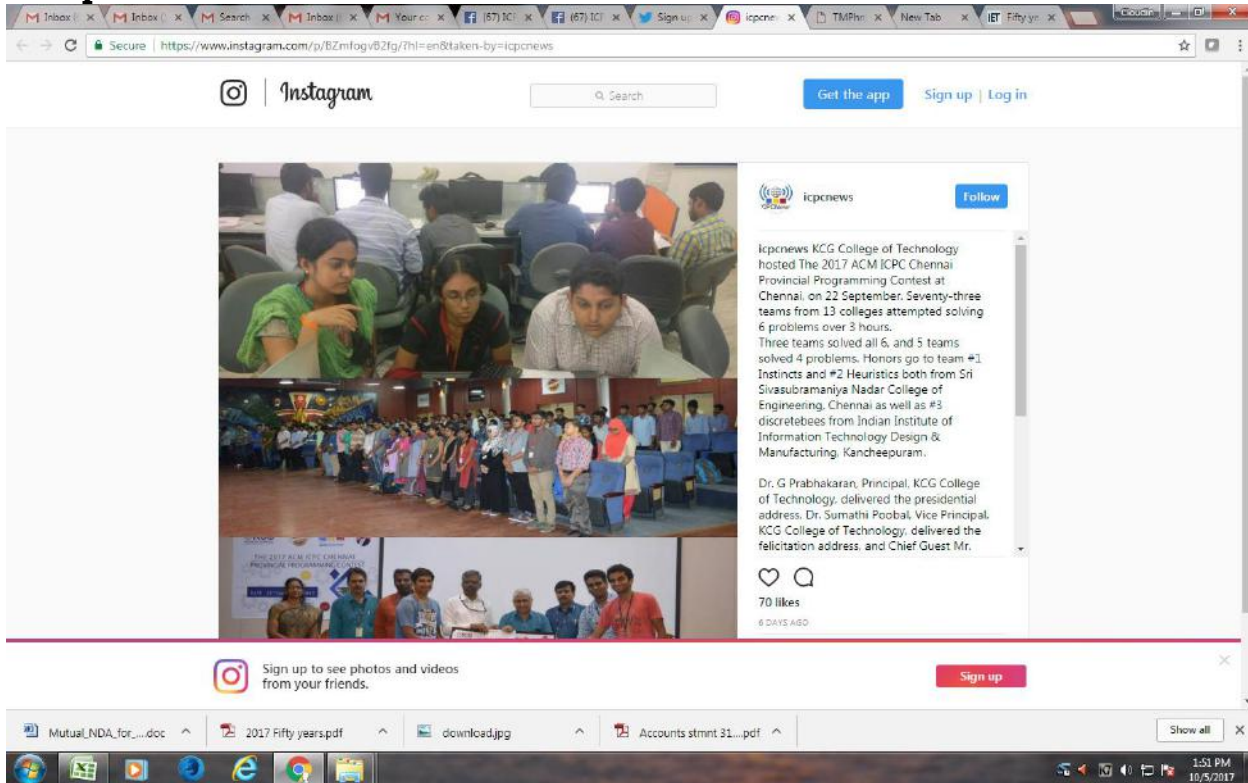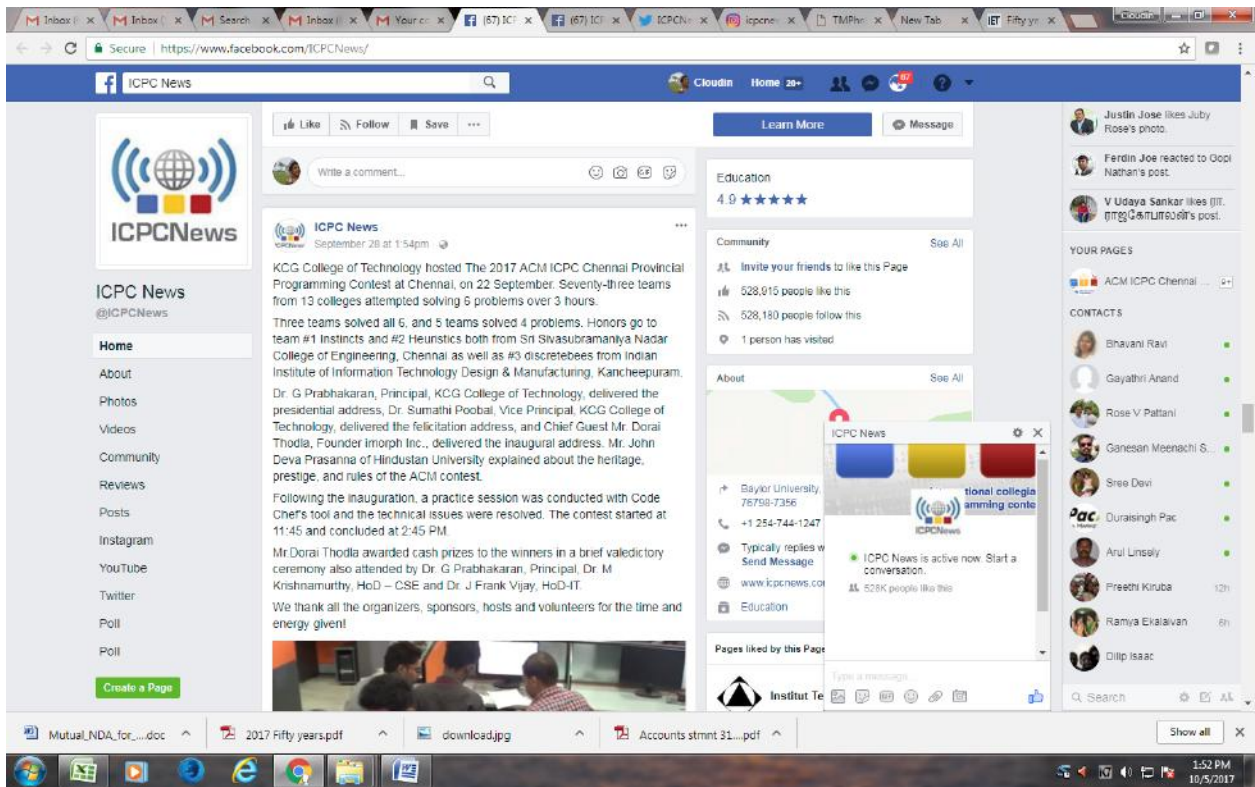

First Position - Instincts

Second Position – Heuristics

Third Position – Discretebees

Glimpse of ACM ICPC in Social Media

Technical Clubs

Engaging students in their first year of college is critical to student retention, as their first-year experiences can set the tone for the remainder of their educational careers. Today, millennials make up a large part of the student community, and the way in which these students communicate has changed. For millennials, it's all about mobile technology, including smart devices and apps, challenging higher education to find new ways to engage with our students. To make the students industry- ready by enlightening their technical skills, various clubs are initiated by the department like mobile app club and women coding club.

<u>Report on Activities of Mobile App club ODD Sem(2017-18)</u>

Date and Venue :16th Sep 2017 at Watts Humphrey Lab- KCG College of Technology
Training Team :Mr.B.Nikesh Kumar, Technical Staff, ZOHO Corp
Participants :

First Year Students

Description:

The Mobile app club was inaugurated by Mr.B.Nikesh Kumar, Technical Staff, ZOHO Corp. In his address speech, he pointed the applications of Mobile Apps in diverse fields and also stressed about commercial hybrid applications development. His speech was an eye opener for the students who were just beginners to App development.A group is formed among the club members to share their queries and learning's.

Inaugural Agenda of Mobile Application Club

Group photo of Alumini 2017 Pass out students at Mobile App club

23rd September 2017(Second Session)

The session was handled by Dr.R.Anand.,Asso.Prof/IT on "Hybrid Applications using Appypie and ionic. In his session he explained the concept of hybrid applications in both the platforms. He gave some ideas to develop the industry standard hybrid applications .
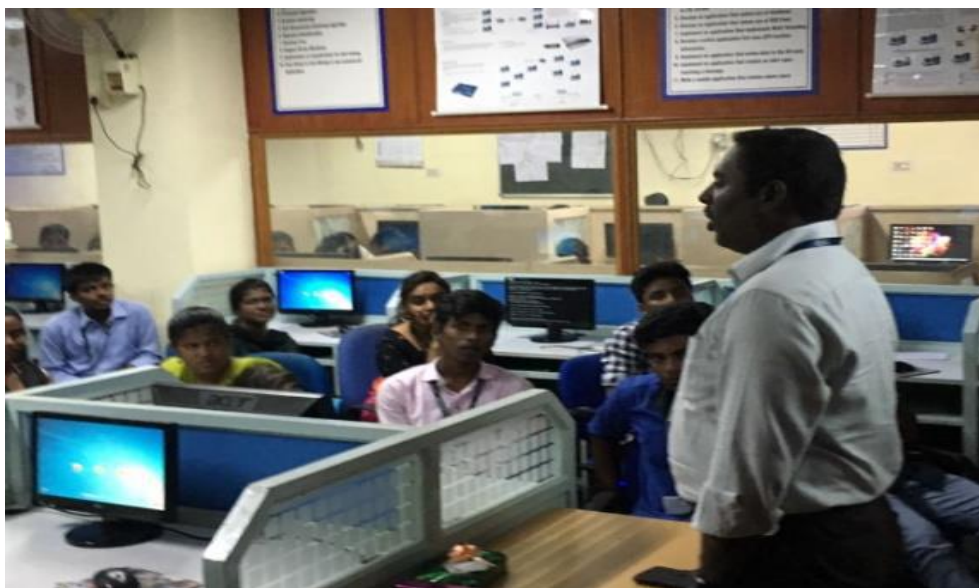
Mobile App Club Importance Speech by Dr.J. Frank Vijay – HoD - IT

Report on Activities of Mobile App club Even Sem (2017-18)

Date and Venue :10th Feb 2018 andT-07- KCG College of Technology

Training Team :Mr.Murali Mohan, CEO, AvlogInfotech Pvt, Ltd,Bangalore

Participants :

First Year Students

Description:

The Mobile app club was inaugurated by Mr.Murali Mohan, CEO,AvlogInfotech Pvt, Ltd,Bangalore. In his address he pointed the applications of Mobile Apps in diverse fields and also stressed about commercial and industrial standard mobile development. His speech was an eye opener for the students who were just beginners to develop the mobile application as per industry standard.

Mobile App Club Agenda

Mr. Sreekantha Kumar, Associate Professor honouring Memento to the chief guest

Feb 22nd 2018 (Second session)

The session was handled by Dr.R.Anand.,Asso.Prof/IT on "Android Mobile application using android studio". In his session he explained about the android introduction and widgets. There are different types of widgets tools that can be focused to develop the mobile applications using android studio.

Another session was handled by Third Year Students K T Naveen and Keshav on "Deployment of android mobile applications". In his session the students developed the mobile apps and deployed the app using smartphones.

Lab Session – Hands on Training – Mobile App Club

Outcomes:

- ➢ The students learnt to customize their app.
- ➢ To customize the template provided by the android studio
- ➢ The students learnt all types of widgets in android studio and eclipse plugin
- ➢ The students learnt to deploy the apps in their phones.

The mobile applications developed by the first year students under the guidance of Dr.Anand R – Associate professor of IT department are listed below:

1: ECD

(Engineering College Details with google maps)

Description:

The ECD app is about simplifying Counselling process and for students to know more about the college they are going to select.

The Mission is to give detailed information about the vacancies available during Anna University Counselling, Location of every colleges, its infrastructure and complete review about college.

Screen-Shot:

Welcome Screen for ECD

Education Institution Details linked with google map

2:Wood Crafter

Description:

Wood Crafter is an online shopping app which can be used to access the website of wood crafter and manage the orders in a single app.

Wood crafter can be used in any android versions as it is developed to support till the current android version N - 7.0.

Screen-Shot:
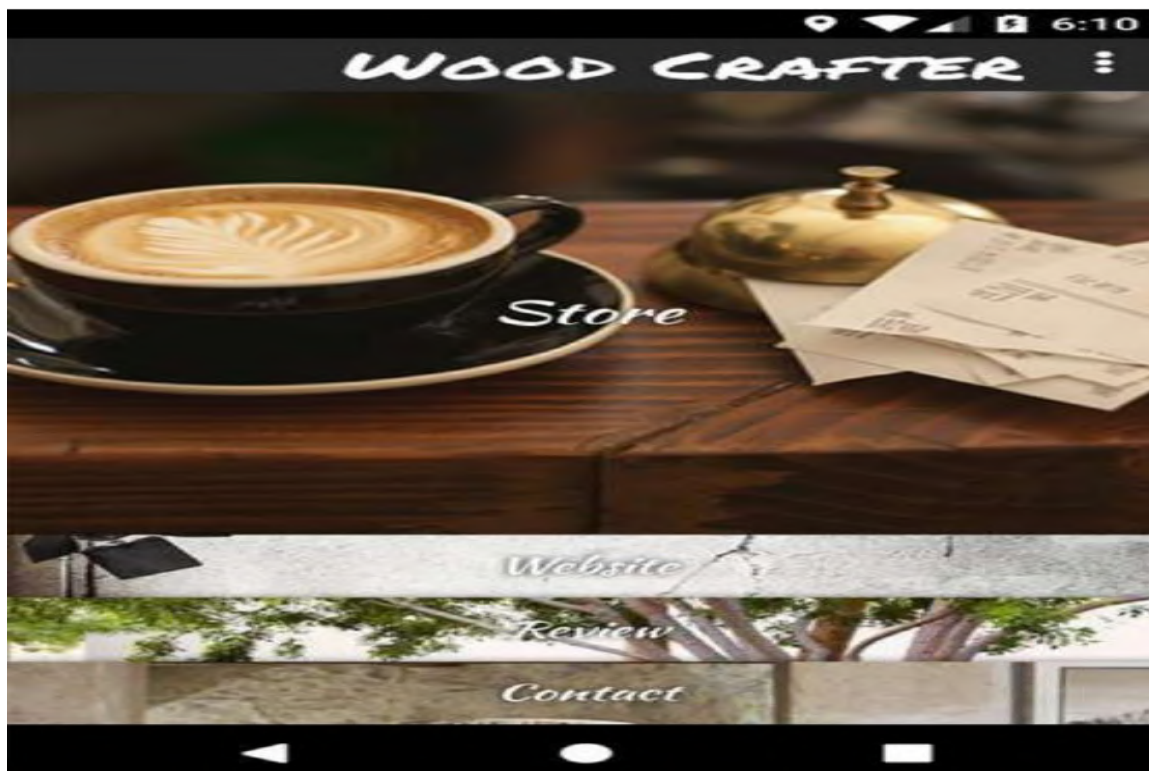
Wood Crafter Welcome Screen

3:Agriculture
Description:

Agriculture app deals with the Agricultural Science, the primary aim is to create awareness about agriculture.Agriculture app can be used in any android versions as it is developed to support till the current android version N - 7.0.

Screen-Shot:

Welcome Screen

4:TechSport

Description:

The main objective of this app is to know more knowledge about sports and view the upcoming events in the colleges and achievement of the participants.

Screen-Shot:
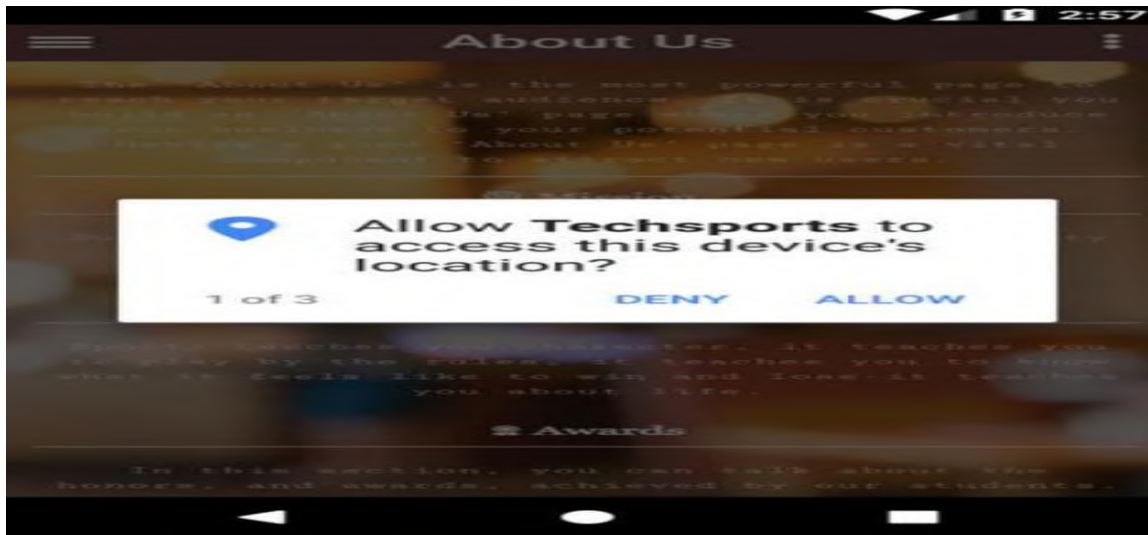
Welcome Screen for TechSports

5:Blood Bank

Description:

The BloodBank app helps users to get to know about details of blood donating volunteers. The Volunteers information and contact number are provided.

Screen-Shot:

Blood bank Registration Form

Women's Coding Club

KCG WOMEN'S CODING CLUB is an exclusive club for girl students to learn Coding and Associated Skills. It is a platform to create an awareness and interest among girl students on programming. As an initiative, they conducted a Bulid2Learn session for the girl students on 2nd March 2018 at Watts Humphrey Lab. The session was handled by Ms. Bhavani an alumnus of our college, presently working as a Product Developer at Focus InfoTech and Ms. Krthika also from Focus Infotech. In the first session, students were introduced to the concept of turtle in python. Using turtle they were taught to drawlines, shapes and eventually various sceneries. The students were made to apply theirmathematical knowledge and they were also enabled to think in a logical manner. After learning session, the students were asked to prepare scenery as the theme for the competition **Creative Colors** that was conducted on 8th March at Steve Jobs Lab. Around 60 students had registered for the competition and participated with much dedication and enthusiasm. All the students applied their knowledge in creating beautiful scenarios with several themes for the competition. They also explained the hidden meaning behind the scenes and proved their technical abilities. Mr.Dorai Thodla and Dr.Sumathi Poobal Vice principal judged the demonstration. All the competitors presented their work with much excitement. This, in turn, channelized their knowledge and energy towards becoming active participator.

The main objectives of KCG Women's Coding Club are to improve computational power, logical thinking of students and motivate the students to participate in various events in and outside the college. It also aims to help girls to fearlessly explore their idea and create the next generation applications. The long-term goal of the Club is to become a movement to empower more and more girl students.

Dr. Sumathi Poobal ,Vice-Principal inaugurated KCG Women's Coding Club by launching club's official website during Women's Day Celebration. Mr. Dorai Thodla, Heads of the Departments, Faculty and Students from various departments attended the session and made this event fruitful. . Top 5 coders of Creative Colors event had recognized during the function with cash prizes and certificates. Overall the celebration and functions went well.

Introduction about Club – Ms. A. Anju – Assistant Professor – IT Department
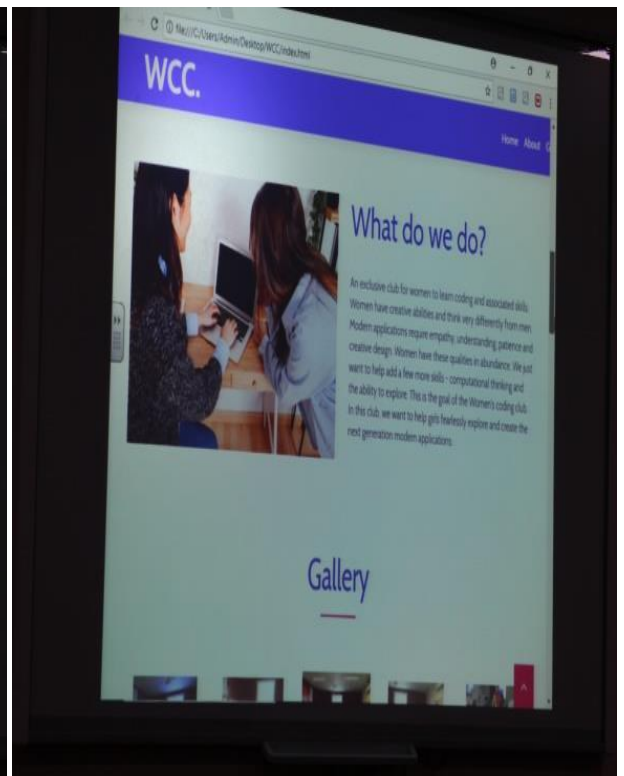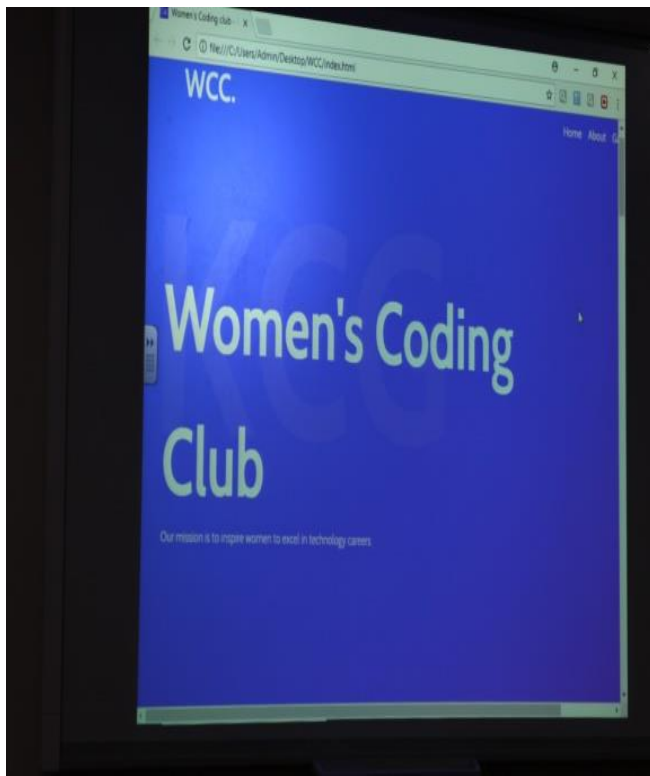
Women's Coding Club Website

An AV about the Club

Prize Distribution of Creative Colors

Research Activities

Patent Filing

List of Inventions Done by Information Technology Department Staffs:-

1. Ms. A. Anju, Assistant Professor, Amreen S, Divya Priya V and Maria Rashmi Fernando M (Students)– Information Technology Department invented "Intelligence Ambulance Alert System Using RF" and filed the patent provisionally in the patent office on 30th June 2017 – Reference No - E-2/1786/2017-CHE & Application No - 201741022950.

With the large population and large amount of vehicles there is a big trouble of car accidents or road accidents, and with these overcrowded roads there is a problem of delay in first aid service. To overcome this delay in first aid service this invention describes a solution that is "Intelligent Ambulance Alert using RF with Automatic Traffic Control" which includes the accident detecting, alerting and tracking mechanism with automatic traffic light controlling system such that the ambulance can achieve a free way in order to provide the first aid to patient as fast as possible. The proposed system also include a patient monitoring system. In health monitoring system, the patient's vital health parameters such as heart rate and body temperature is measured. These parameters are sent to a PC in ambulance via serial communication and this data will be sent to the hospital server. In traffic control system an RF transmitter on the ambulance will communicate with the RF receiver mounted on the signal post. An algorithm is used to control the traffic signals automatically based on the key pressed by the driver from keyboard in the ambulance. The information reading the current as well as future location of ambulance is sent from the ambulance itself. This information is used to optimally control the traffic.

2. Ms. A. Anju, Assistant Professor, Deepak T and Dinesh B (Students)– Information Technology Department invented "Automatic Theft Handling" and filed the patent provisionally in the patent office on 30th June 2017 –

ReferenceNo-E-2/1788/2017CHE&ApplicationNo-201741022952.

Security, especially theft security of vehicle in common parking places has become a matter of concern. An efficient automotive security system is implemented for anti-theft using an embedded system integrated with Global Positioning System (GPS) and Global System for Mobile Communication (GSM).This proposed work is an attempt to design and develop a smart anti-theft system that uses GPS and GSM system to prevent theft

and to determine the exact location of vehicle. The system contains GPS module, GSM modem, Infrared sensors, DTMF decoder IC MT8870DE, 8051 microcontroller, relay switch, vibration sensor, paint spray and high voltage mesh. GPS system track the current location of vehicle, there are two types of tracking used one is online tracking and other is offline tracking. GSM system is also installed in the vehicle for sending the information to the owner of the vehicle because GPS system can only receive the vehicle location information from satellites. In case of accident this system automatically sends the message for help to ones relatives. The preventive measures like engine ignition cutoff, fuel supply cutoff, electric shock system (installed on steering wheel) and paint spray system are installed in the vehicle which is controlled using user or owner GSM mobile. The owner can lock or unlock his/her vehicle with the help of SMS. This complete system is designed taking in consideration the low range vehicles to provide them extreme security.

3. Mr. M. Baskar, Assistant Professor(SG),Sruthi S and Pritikha P(Students) – Information Technology Department invented "Car Accident Location Identification System" and filed the patent provisionally in the patent office on 30th June 2017 – Reference No - E-2/1785/2017-CHE & Application No - 201741022949.

When an individual riding his/her bike, met with an accident, there is a chance that the individual may suffer from a serious injury or may expire. This system is a solution to the problem. The system acts as an accident identification system that gathers and sends this vehicle information that met with an accident, and conveys it to the nearest control room.

For this the user vehicle is fixed with an RF transmitter circuit that has a vibration sensor along with microcontroller, RF encoder and also fitted with an RF transmitter. Each and every control room must have an RF receiver fitted to receive the transmission. Whenever a user vehicle meets with any accident, the vibration sensor detects and gives its output. This output is then detected by the microcontroller. Now the microcontroller sends this change detection signal to an RF transmitter. The RF transmitter now intern begins transmitting this accident data. The nearest RF transmitter reads the signal and then shows it on an LCD screen. The person monitoring the LCD screen may react to it, reach the accident location and help the needful.

4. Mr. V.P. Sreekantha Kumar, Associate Professor and Aarthi S(Student)– Information Technology Department invented "IOT BASED METRO BUS TRANSPORT SYSTEM" and

filed the patent provisionally in the patent office on 30th June 2017 – Reference No - E-2/1787/2017-CHE & Application No - 201741022951.

The Internet is a living entity, always changing and evolving. New applications and businesses are created continuously. In addition to an evolving Internet, technology is also changing the landscape. Broadband connectivity is becoming cheap and ubiquitous; devices are becoming more powerful and smaller with a variety of on-board sensors. The proliferation of more devices becoming connected is leading to a new paradigm: the Internet of Things. The Internet of Things is driven by an expansion of the Internet through the inclusion of physical objects combined with an ability to provide smarter services to public. The IoT can assist in integration of communications, control, and information processing across various transportation systems. Application of the IoT extends to all aspects of transportation systems, i.e. the vehicle, the infrastructure, and the driver or user. The system collects data by vehicle terminal and uploads data to the server through the network and makes data visible to the consumer. One aspect, the consumer may inquire about public transit vehicle information by Web. On another aspect, the consumer can know public transit vehicle information by station terminal. The experiments have tested that the Intelligent transportation system can offer public transit vehicle information to many consumers with convenient way thereby this system can ease the city mass transit problem.

5. Dr. J. Frank Vijay, Professor & Head – Information Technology Department and Balaji S (Student) invented "TRACKING AND BUS WEIGHT DETECTION" and filed the patent provisionally in the patent office on 30th June 2017 – Reference No - E-2/1798/2017-CHE & Application No - 201741022998.

In recent years, due to the expansion of the vehicles' transportation system and concerns about the lack of accurate calculations of vehicle weight, a system that is able to calculate the vehicle's weight at any moment, seems to be necessary. Given that the transportation electronic management is related to the location and movement data of vehicles, information about movement, speed and time, traveled path, the weight sensors and fuel for the quick and timely decisions are required. Therefore the design and implementation of modern systems for monitoring and control of these devices to make quick decisions and plan codified is essential. In this system, the different ways of measuring the vehicle weight and the problems of each them has been described then the weight sensor device which is equipped with an AVL system has been proposed.
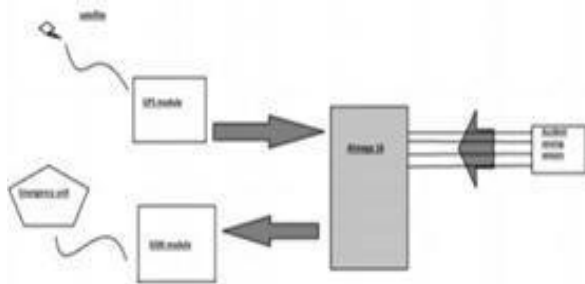
Figure 1: Block diagram of Accident Alerting Mechanism

- ATMEGA 16 Microcontroller
- GPS
- GSM
- Sensors (pressure, vibration etc)
- Emergency unit
- Satellite
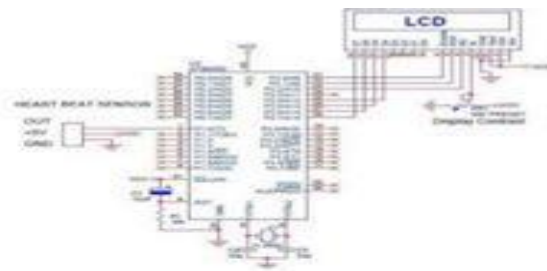
Figure 3: Block diagram of health monitoring system

- Heart Rate
- ATMEGA 16
- Microcontroller
- Hospital
- LCD
- Body
- Temperature
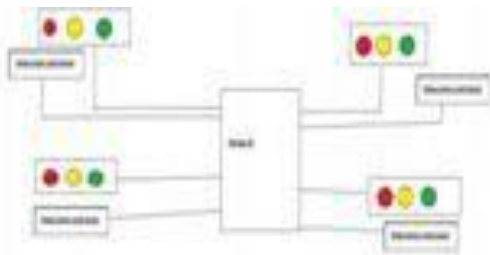
Figure 2: Block diagram of traffic control system

- Micro-controller ATMEGA 16
- Led(red, yellow, green)
- Seven segment
- Tshop sensor
- Sound sensor

Prototype Model of TRACKING AND BUS WEIGHT DETECTION

Publications by faculty members

1. Dr. J. Frank Vijay, "Time Variant Predicate Based Traffic Approximation Algorithm for Efficient low rate DDoS Attack Detection" TAGA journal, Volume 14, ISSN No: 1748-0345, 2018

2. Dr. J. Frank Vijay," A novel approach for gait analysis using activity classifier for medical analysis", International Journal of Biomedical Research, Volume 29, ISSN No: 0970-938X,2017

3. Dr. J. Frank Vijay,"Software Defined Networking (SDN) Based Video Service Using Djikstra's Algorithm and Kruskal's Algorithm", International Journal of Computational and Theoretical Nano science,Volume 14,Issue 1,2017

4. Dr. J. Frank Vijay," Software Effort Estimation Using Use Case", International journal of Innovative Research in Technology, Volume 3,Issue 10,ISSN No: 2349-6002,2017

5. Mr. V P Sreekanthakumar," MEDIKLIX : An Android Application Based on Online Medicine Shopping", International Journal of Science Technology & Engineering, Volume 3,Issue 9,2017

6. Mr. V P Sreekanthakumar,"Implementation of Vehicle Tracker", International Journal of Innovative Research in Technology, Volume 3,Issue 10,2017

7. Dr. R. Rajkumar," Workload Aware Load balancing For Cloud Data Center", International Journal of Innovative Research in Technology, Volume 3,Issue 10,ISSN No: 2349-6002,2017

8. Dr. R. Rajkumar," Mobile Hand Waving Behaviour Analysis for Establishing Emergency Support and Protection", International Journal of Science Technology & Engineering, Volume 3,Issue 9,ISSN No: 2349-784X,2017

9. Dr. R. Rajkumar," Trace Event- A Web Mining based Application for the Collection of Online Web Events", International Journal of Science Technology & Engineering, Volume 3,Issue 9,ISSN No: 2349-784X,2017

10. Dr. R. Rajkumar,"ADSLANF: A negotiation framework for the cloud management system using Bulk Negotiation Behavioural Learning approach", Turkish Journal of Electrical Engineering & Computer Sciences, Volume 25,ISSN No: E-ISSN: 1303-6203,2017

11. Ms. R. AdlineFreeda," Action Based Keyword Driven Framework for Testing Web Applications", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X,2017

12. Ms. R. AdlineFreeda," Customization of ROM", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

13. Mr. M. Baskar," Time Variant Predicate Based Traffic Approximation Algorithm for Efficient low Rate DDoS Attack Detection", TAGA Journal, Volume 14,ISSN No: 1748-0345,2018

14. Mr. M. Baskar," Developing Efficient Intrusion Tracking System using Region Based Traffic Impact Measure Towards the Denial of Service Attack Mitigation", Journal of Computational and Theoretical Nanoscience, Volume 14, Issue 1,ISSN No: 1546-1955,2017

15. Mr. M. Baskar," Implementation of a Honey Pot Security mechanism on a Raspberry Pi", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

16. Mr. M. Baskar," Lucy-The Visualizer", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

17. Mr. M. Baskar," Multi Model Network Analysis for Improved Intrusion Tracing towards Mitigating DDoS Attack", Asian Journal of Research in Social and Humanities, ISSN No: 2250-1665,2017

18. Mr. M. Baskar," e- Secured Document Forwarding", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

19. Mr. R. Sampath," Virtual Room Visualizer", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X,2017

20. Mr. R. Sampath," Vehicle Detection, Classification And Counting (VDCC)", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

21. Mr. N. Bhaskar," Design Optimization using Crowdsourcing", Global Research and Development Journal for Engineering, Volume 2, Issue 4,ISSN No: 2455-5703,2017

22. Mr. N. Bhaskar," Sports Club Management System Sports data analysis", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

23. Mr. N. Bhaskar," Smart Mobile Application Calling for Visual Impairment's People Using Gestures", International Journal of Science Technology & Engineering, Volume 2, Issue 10,ISSN No: 2349-784X,2017

24. Ms. A. Anju," Customized Apparel Shopping", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X,2017

25. Ms. A. Anju," ShopEZY- An Android Application Based on Barcode Scanning and Data Analytics", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X,2017

26. Tina Susan Thomas ,"Detection and removal of Spoofed Data using Vanet", International Journal of Innovative Research In Science, engineering and Technology, Volume 7, Special Issue 4, April 2018

27. Tina Susan Thomas ," Design and Implementation of Model to Retrieve Safety Information of Moving Vehicle", International Journal of Innovative Research In Science, engineering and Technology, Volume 7, Special Issue 4, April 2018

28. Tina Susan Thomas, "Knowledge Management and Outsourcing: Reviewing the Underlying Global and Cultural Issues" , Business Sciences International Research Journal Volume 5 Issue 2 , ISSN 2321-3191.

29. Tina Susan Thomas ,"Waste to Useful: A Business Strategic View of Crumb Rubber and Beach Sandal Manufacturing" , International Journal for Scientific Research and Development Volume 6 Issue 2 April 2018 ,ISSN 23210613

30. Tina Susan Thomas presented a paper   "Understanding Knowledge Sharing Among Researchers by Social Network Analysis" in Americas Conference on Information Systems (AMCIS 2017) which was held in Massachusetts, Boston on 10 – 12 August, 2017.

31. Ms. V.S. KrithikaaVenket," A survey: Maintaining Seclusion on Sharing of images via Online", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), Volume 3, Issue 16,ISSN No: 2394-3785,2017

32. Mr. B. Hariharan," Tracking And Providing Smart Healthcare Service Using IOT", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

33. Ms .S. Subbulakshmi," M-Polling with QR-Code Scanning and Verification", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X ,2017

34. Ms .S. Subbulakshmi," Design and Monitoring of Water Level Model using Sensor Technology", International Journal of Science Technology & Engineering, Volume 3, Issue 9,ISSN No: 2349-784X,2017

35. Ms .S. Subbulakshmi," Smart Health Prediction Using Multiplicative Homomorphic Encryption Algorithm", International Journal of Innovative Research in Technology, Volume 3, Issue 10,ISSN No: 2349-6002,2017

Details of Funded projects

1. Dr. R. Anand and Dr. Frank Vijay J applied for an amount of Rs.25,00,000 for a project entitled "Agriculture assistance on web and mobile using cloud based multitenant approach" in July 2017 at SERB – EMR

2. Dr. R. Anand and Dr. Frank Vijay J applied for an amount of Rs.50,000 for a project entitled "Women Entrepreneurship" in September 2017 at TNSCST-Dissemination of Innovation Technology

3. Dr. R. Anand applied for an amount of Rs.60,000 for a project entitled "MOOC Course (Overall In charge)" in 2017 at UGC-Expression of Interest

4. V.P Sreekanthakumar applied for an amount of Rs.50,000 for a project entitled "E-Seva Services" in September 2017 at TNSCST-Dissemination of Innovation Technology

5. Dr. R. Anand applied for an amount of Rs. 2,00,000 for a project entitled "Cyber Security and Malware Analysis" in October 2017 at SERB-Seminar

6. Dr. R. Anand applied for an amount of Rs. 4,00,000 for a project entitled "Techothon'18" in October 2017 at SERB

7. Dr. R. Anand applied for a project entitled "Animal intrusion detection and alarm systems" in October 2017 at PALS-RuTAG

8. M.Baskar and Dr. Frank Vijay J applied for an amount of Rs. 10, 43,999 for a project entitled "IP Based Adaptive Intrusion Mechanism for Detecting Low Rate DDoS Attacks" in November 2017 at MOCIT

9. Dr J.Frank Vijay applied for an amount of Rs. 8,10,000 for a project entitled "International Conference on IOT and Emerging Social Innovation Technologies(ICIESIT'18)" in November 2017 at SERB

10. Dr J.Frank Vijay and Dr.R.Anand applied for an amount of Rs. 7,00,000 for a project entitled "Challenges to build intelligent based smart cities using iot and cloud based technologies" in November 2017 at AICTE-AQIS-FDP

11. Dr J.Frank Vijay and V.P Sreekanthakumar applied for an amount of Rs. 5,00,000 for a project entitled "Smart Agriculture Based Data Intelligence Using IOT and Cloud Computing" in November 2017 at AICTE-AQIS-STTP

12. Dr J.Frank Vijay and Mrs.Anju applied for an amount of Rs. 25,00,000 for a project entitled "SDPB-Skills and Personality Development Programme for Centre SC/ST" in November 2017 at AICTE-AQIS

13. Mrs. R. AdlineFreeda applied for an amount of Rs. 3,50,000 for a project entitled "CSI Sponsored Five Days National Workshop On Cyber Security Threats And its Awareness in Social Media" in November 2017 at SERB

14. Ms.krithikaavenket applied for an amount of Rs. 2,50,000 for a project entitled "CSI sponsored two days national seminar on ict tools for health care and assistive technology" in November 2017 at SERB

15. Mrs.Tina Susan Thomas applied for an amount of Rs. 2,05,000 for a project entitled "Two Days National Workshop On The Role of IoT in Health care and Medical Issues" in December 2017 at SERB

16. Bhaskar N applied for an amount of Rs. 8,50,000 for a project entitled "Two weeks intensive training on capacity building for SC/ST youth on Employability skills (CBYES'18)" in December 2017 at SERB

17. Dr.J.Frank Vijay applied for an amount of Rs. 40,000 for a project entitled "IOT based integrated waste management system for building clean and SMART India" in January 2018 at CSI

18. Dr.R.Anand and Dr.J.Frank Vijay applied for an amount of Rs. 6720000for a project entitled "Predictive Analytics Big Data based On-Demand efficient power supply Virtual Power Plant for smart cities" in March 2018 at DST

ICKCT '18

The Second Edition of International Conference on Knowledge based Computing Technologies (ICKCT) 2018 was organized by the departments of CSE and IT at KCG College of Technology, Chennai on 6th and 7th April 2018. The conference was inaugurated by Dr. D.P.Kothari, Director Research, Wainganga College of Engineering and Management, Nagpur. During his address he gave emphasis to the need for collaborative research focused towards social requirements of the nation. Dr. Suria R Asai, Associate, Software Engineering and Design, Institute of Systems Science, National University of Singapore was the guest of honour. During her speech she related how students graduated abroad are industry-ready and well-focused in their choice of career.Dr. G Prabhakaran, Principal, Dr.SumathiPoobal, Vice Principal, Dr. M .Krishnamurthy, Prof & Head – CSE and Dr. J. Frank Vijay, Prof &HoD – IT were present for the inauguration. The arrangements were administered by the convenors Dr.Selvi P

Rajendran and Mr. V.P. Sreekantha Kumar. Delegates from the industry, academia and research scholars from the country and outside the country presented 74 papers and best papers were suitably rewarded. Few alumni of the institute also took part in the programme.

HoD- IT – Delivering Vote of Thanks at ICKCT'18

Dr. Suria R Asai - Associate - National University of Singapore – Addressing the Delegates

Discussion about Micro Services at Conference Hall with Dr. Suria R Asai - Associate - National University of Singapore

Session Photo where Delegates are presenting their Conference Papers

Valedictory Photo – ICKCT'18

Valedictory Function – ICKCT'18

PEDAGOGICAL APPROACHES

The IT department of KCG College of Technology stands out from their counterparts on their unique pedagogy. The styles of teaching vary according to the need of the children. The IT department follows the very core philosophy of KCG College of Technology " To make every man a success and no man a failure" in both letter and spirit. This is evident by the way our talented and dedicated faculty members concentrate even the most late blooming student. No student should go out of the class room without understanding the concepts thought; this is the prime moto of our every single faculty member. To secure this level of integrity strenuous attempts by faculty members in terms of power point presentations, roleplays, practical sessions, academic videos etc are employed. A glimpse of the same can be seen below.

Various Pedagogical Methods followed in Information Technology Department

REPORT ON IET SPONSORED NATIONAL SEMINAR ON HIGH PERFORMACE COMPUTING 31st AUGUST 2017

In KCG College of Technology, Chennai, IET Student Chapter conducted an IET Sponsored National Level Seminar on High Performance Computing on 31st August 2017.

The following are the Sessions and the Speakers

Session 1 : Expert talk on "High Performance Computing Insight and Challenges"
by Mrs.S.Rajeswari, Head Scientific Information Resource Division, Indira Gandhi Centre for Atomic Research(IGCAR), Kalpakkam.

Mrs.Rajeswari gave a brief introduction on High Performance Computing and its various impact in applications. She spoke about the resource hungry applications and how to solve the grand challenges using High Performance Computing. The importance of hardware and software for HPC was discussed. She mentioned the usage of High Performance Computing in research institutes, government labs, engineering design, silicon manufacturing etc. She talked about the basic needs of architecture i.e. pipelining and super scaling. The students were enlightened on various other domains like Intel's Micro architecture, distributed memory system, heterogeneous systems, GPU. Mrs. Rajeswari delivered informative knowledge to the students and also interacted with them.

Session 2: Multicore Computing

The session about "Programming Models and Architecture for many core systems: Challenges and opportunities for the next 10 years", was given by   Dr. K. Pradheep Kumar, Assistant Professor, BITS Pilani.

Dr. Pradeep started off his speech by questioning the interests of the students for a better content delivery. He gave an introduction on what Multicore systems were and mentioned that the computational and storage needs of workloads in several areas are growing exponentially. He highlighted the importance of study of Multicore system, cloud scenario, CPU and Data intensive operations. He explained about the "The Homogenous High Level Dataflow system model". There are different architectural tools used in Multicore which were discussed and explained. On that high note, the session ended, leaving the students to come up with very interesting questions which were answered by the speaker.

Session 3: Introduction to Computational Complexity

The last session was presented by Dr. P. Ragukumar, Assistant Professor, Rajalakshmi Engineering College. He began by briefing the audience on the basics of computation complexity regarding the orders of growth. He compared the present computer with a computer than can be 100 times faster in the near future and it advantages. A video on Concrete breakage by using pulley was played which gave an idea on machine with concrete. He enlightened the students with various other topics like scalability, space and time complexities. He discussed the problem classification and gave examples regarding them. He demonstrated the examples for NP and NP- Complete problems. The session ended with an interaction with the students.

REPORT ON IET SPONSORED TWO DAY SEMINAR ON FUTURISTIC OPPORTUNITIES AND CHALLENGES IN IOT

21 & 22 July 2017

In KCG College of Technology, Chennai, Department Of Computer Science And Engineering and Department Of Information Technology jointly conducted a Two Day National Level Seminar on Futuristic Opportunities and Challenges in IoT (Internet of Things), under the banner of The Institution of Engineering and Technology.

Day 1 : 21 July 2017

The seminar was inaugurated by **Mr.Rajiv R G**, Principal-Technologist from DXC Technology, Chennai in the august presence of Dr.G. Prabhakaran, Principal, KCG College of Technology, Dr.Sumathi Poobal, Vice Principal, KCG College of Technology, Dr. M Krishnamurthy, Head of the Department, Department of Computer Science and Engineering, and Dr. J Frank Vijay, Head of the Department, Department of Information Technology.

In the inaugural talk '**Emerging Trends of IOT**',   Mr. Rajiv R G gave an overview on IoT. He gave simple examples on how his life is being connected to IoT in his daily routine. He spoke about the areas like smart infrastructure, health care, retail and transportation in which various applications could be developed. His inquisitiveness towards this domain led him to write a paper on NFC retail as he was also a part of the retail sector earlier. He made a video presentation about Amazon Go, which revealed

about smart shopping and gave an idea of how IoT going to rule the future world. He also spoke about the technologies being used in health care and the development and need for a smart home in coming future. He pointed out a number of emerging trends based on IoT.

He also touched areas like sports, i.e. cricket being connected with IoT as there are talks that Intel is merging with ICC. He discussed the threats and challenges behind IoT which is equally something we need to think of. He ended his presentation with a beautiful video on Samsung display which makes visualization easier. His thought provoking presentation led many students to ask him quite a few doubts and interaction with him.

Mr. Srinivasan Sundararajan, Technology adviser, GAVS Technologies, Chennai gave a technical speech on **Block Chain and Smart Contract**. It started at an enthusiastic note and was sure to match the wavelength of his audience with that of the orator, with his simple, easily understandable and interactive speech. He explained what Block Chains are by comparing it to the internet technology. He stated that internet is used for information exchange whereas Block Chains are used for financial exchange across various media without a centralized controlling party. He introduced the currently existing concept of Bit coins and its usage in Block Chain technology for transactions across peer to peer distributed networks. He also gave a gist of how Block Chains can be implemented in the very near future and the obvious applications of it. Smart Contracts was the other topic he enlightened the audience about.

He then explained the advantages, challenges and possible applications of the Smart Contract which, according to him, is a very genuine way of transactions that required only lines of code that define the manual contract between the seller and the buyer. This time-efficient, trustworthy technology will be much welcomed when it takes over in the recent years.

Mr. Shabarinath Premlal Founder, ResPro Labs, Chennai delivered an expert talk on **Entrepreneurship opportunities for IOT.** Hegave a brief description of IOT and its applications. He spoke about the most fascinating gesture control in games which is quite popular right now. He stated a simple theory of how to become an entrepreneur, which was think of an idea, make a prototype and structure the revenue model.

The most interesting part of the seminar was the description of E – sensors which was based on machine language and predictive analysis .He had brought a working model of the E-sensor he had constructed and shared his knowledge on it. Many students got to try out how the e - sensors actually worked. Mr. Shabarinath continued to inspire with his wonderful presentation. The students were are all were very excited to listen to the humorous yet a Knowledgeable seminar.

Day 2 : 22 July 2017

Mr. Dileep Paruchuri, Project/Program Manager, Intel Technologies, Bengaluru, enlighten the students all about **Value Addition in IoT Applications**. He started his extremely interesting speech, which he preferred to refer as discussion, by asking a few questions to the audience, probably to know the level of understanding about IoT in the students' brains.

He briefly discussed about IoT in various fields like home care, sports, retails, etc but spent his time in explaining how IoT was used in health care with an ECG measurable device that had additional glucometer and activity meter embedded into it, which was actually one of Intel's Sensitive platform for Health- Reference solution's product.He explained the device's working briefly with its detailed applications in real life, along with the challenges they had to face before this was released for sale.His innovation definitely was thought provoking and inspiring.

He then brushed upon the various applications of IoT and its advantages in major fields including Rolls Royce's engine used by major airlines companies and how business can be made by monitoring the engines. The next application he talked about was Home Care, for which he interacted with the crowd about the basic existing technologies used for Home care. The interesting hour of discussion came to an end after a questionnaire, answered almost perfectly by the speaker.

Mr.Ramakrishna Patra, Head of Manufacturing Solutions and IoT Nokia, Chennai gave a talk on **Shaping the Future for Connected World**.A formal introduction about the company Nokia and its establishment in Chennai was given by our expert speaker. He spoke about the birth of connecting people in different situations and the future predictions we haven't thought of. Pin-points were made about the usage of IoT projects in every minute aspects of our life and also on how to enhance them using the same. He says now life is all about driving the automation of everything

The speaker then emphasized on the application values of IoT on our daily lives. Not only did he share information, but also gave the students many ideas to come up with. Now that 4G has captured the market, he expressed his views on 5G and how Nokia is going to achieve it. The videos which were played at the end of the session drove the students to the edge of their seats and made a lasting impact in their minds.

Mr. P Kartikeyan, Manager, Industrial Engineering and Automation, Nokia, Chennai delivered an interactive session on **IIoT-Industrial IoT** with great vigour and captivated the attention of the audience with the highly engaging oration. The session with was thoroughly enjoyable. Students were taught about Industrial use cases of IoT devices and how they are useful. The speaker showed how Line following robotic arms are fitted in industries to help speed up production and how it helps in increasing the speed of production.

He also compared 4G technology with 5G technology in the communication system used by the IoT devices set up in the Industries. The benefits and disadvantages of both were also debated. He remarked that with the industries switching to 5G technology, Industrial IoT is made more attractive because of the enormous increase in computation speed and power.

The session moved towards data security which is generally described to be a main concern in IoT. Data security was discussed in detail. Then He gave a rousing speech on entrepreneurship and how to convert good ideas into products. He also talked about the scope of the products in the future of IoT.

The final session on **Challenges and futuristic opportunities of IoT** was presented by **Dr. Padmanaban Ramasamy**, Director, Eishaa Network, Chennai. He began by briefing the audience about the various sectors of IoT including its major role in defense, commercial and industrial sectors. He spoke about the upcoming ideas of smart cities and home automation all across the world. Subsequently, he went in depth into the challenges faced at the time of implementation of IoT by designers and programmers.

He shed some light on the use of battlefield management and emphasized the importance of short time delay or latency. This was followed by an interactive session with the audience, wherein many ideas and knowledge were exchanged and solutions were suggested to overcome problems such as security and encryptions in the field of IoT.

Chief Guests Photo - Challenges and futuristic opportunities of IoT

Group Photo - Mr.Rajiv R G, Principal-Technologist from DXC Technology, Chennai

REPORT ON IETTECHNICAL TALK ON IoT & ACCELERATION PLATFORM, 30TH MARCH 2017

An IET Technical Talk on IoT & Acceleration Platform was held on 30th March 2017 in the Seminar Hall of our campus organized by IETKCTECH, IET Student Chapter. I would like to submit thanks to the Management for the support and encouragement rendered, and I thank our Principal for the continuous motivation to conduct such workshop for knowledge sharing and dissemination.

The resource person of the technical talk was Mr. Aniruddha Kannal, CEO, HED-X, Bangalore, offers experiential and contextual learning programs in cutting edge domains. The team at HED-X is committed to transforming higher education in India.

The technical talk started with the welcome address by the Mr. S.Cloudin, Associate Professor of CSE Dept and Vice-Chairman IET Chennai Local Network.Mr. S. Raghavan, Manager, IET India, Bangalore, gave a brief introduction about IoT, its applications, and the need of students to understand the IoT Platform and its real need in India. Mr. Raghavan stressed the participants to show more interest on IoT Platform, learning its implementation in different directions will motivate the students to implement small modules with IoT will give an good understanding about how to develop the real time modules on IoT. Mr. Sreekantha Kumar V.P., Associate Professor, Dept of IT and IETKCTECH Coordinator introduced the resource persons to the gathering.

The resource person was Mr. Aniruddha Kannal, got his BE in Computer Science from Maharaja Sayajirao University of Baroda and an MS in Computer Science from Binghamton University - State University of New York (SUNY).

Mr. Aniruddha Kannal kindled the need and interest towards IoT to the students and identified various interesting problems in it. In his talk he explained about Gartner Hype Cycle, reveal three distinct technology trends that are poised to be of the highest priority for organizations facing rapidly accelerating digital business innovation. Transparently immersive experiences, the perceptual smart machine age, and the platform revolution are the three overarching technology trends that profoundly create new experiences with unrivaled intelligence and offer platforms that allow organizations to connect with new business ecosystems. Mr. Aniruddha Kannal explained that IoT is a design of innovation paradigm, a framework that brings together a few old and new technology breakthroughs to create business value. He explained about the 4 stages of IoT solution architecture,

Sensors/Actuators, Internet Gateways and Data Acquisition System, EdgeIT, and Data Center / Cloud System. Finally he concluded his talk by workbench projects, vendors, startups, accelerators, incubators, online forums and online mentors available to do innovation in IoT.

The participants provided their valuable feedback as useful and informatics session. Finally the event ends by presenting memento to the resource person, and vote of thanks by Dr. Sumathi Poobal, Vice Principal of our college.

IET Technical Talk on IoT & Acceleration Platform

Chief Guests receiving memento from Dr. Sumathi Poobal, Vice Principal

Innovative Projects Done by Information Technology Students

Smart Toll Payment Using QR Technology

Project Members:311014205001 - Abilash C. &311014205012 - Ezhilraj R.

Project Supervisor: Ms. Krithikaa Venkat. V.S., Assistant Professor, Department of IT

Description: Using Android Smart phone, we can select toll area, time and pay. This, in combination with reduced fuel consumption has positive effect on environment. By introducing this technology, we can make this system automatic and easier and also user can pay the money at anywhere. A user- friendly and convenient mobile E-payment solution is using QR technology. QR code on an item scans it with your Smartphone and immediately has access to a lot of information electronically. E-payment by doing this pre-banking Tollgate transaction processing the drivers will have QR code as a proof in the mobile phone and move to the concern location without any waiting time in tollgates. QR technique will include the QR code reader, the finishing of E-payment on toll-gate process users receives the QR code confirmation. The QR code technology has high securable and lowϖ amount of spend cost and easy steps to pay.

Real Time Parking Management System

Project Members:311014205002 - Alagappan D. &311014205014 - Karthikeyan J.

Project Supervisor: Ms. Krithikaa Venkat. V.S., Assistant Professor, Department of IT
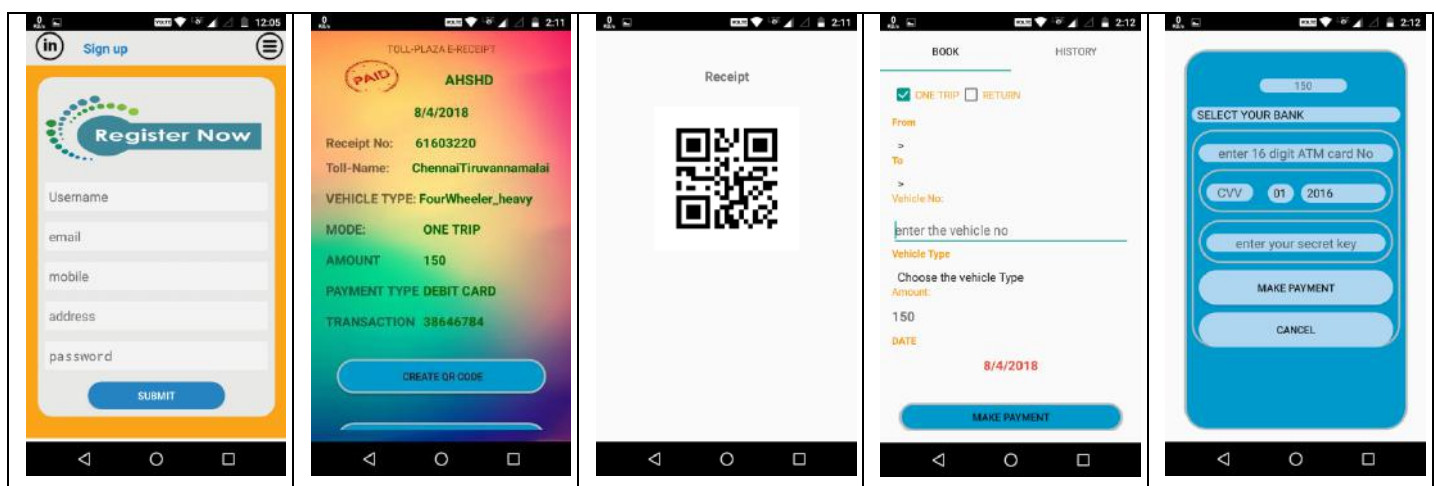
Description : The main motivation of this project is to reduce the traffic congestion that occurs in and around the urban areas which is caused by vehicles searching for parking. Our project presents an car parking system that regulates the number of cars that can be parked in a given space at any given time based on the parking space availability. The

aim of this project is to park the car for allowing the cars into the parking. When a car arrives at the entrance, it will be stopped over a path leading towards the parking lot. Using this app booking can be done from home, and ensuring smooth movement of vehicles at low cost and increasing the probability of finding a free parking space. The hardware part which consists of custom-made sensor units based on a phototransistor with an infrared transmitter that is responsible for determining if a certain parking space is occupied or free. The units connect to a central controller wirelessly using Arduino microcontrollers with Ethernet shields. The central controller is a server hosting a database that is accessible through the developed mobile application. The mobile application is developed using the Eclipse IDE and runs on the Android platform. The users are able to use this application when they enter the mall. They can locate free parking spaces, check the parking fees, locate their cars, and even pay using the mobile application.
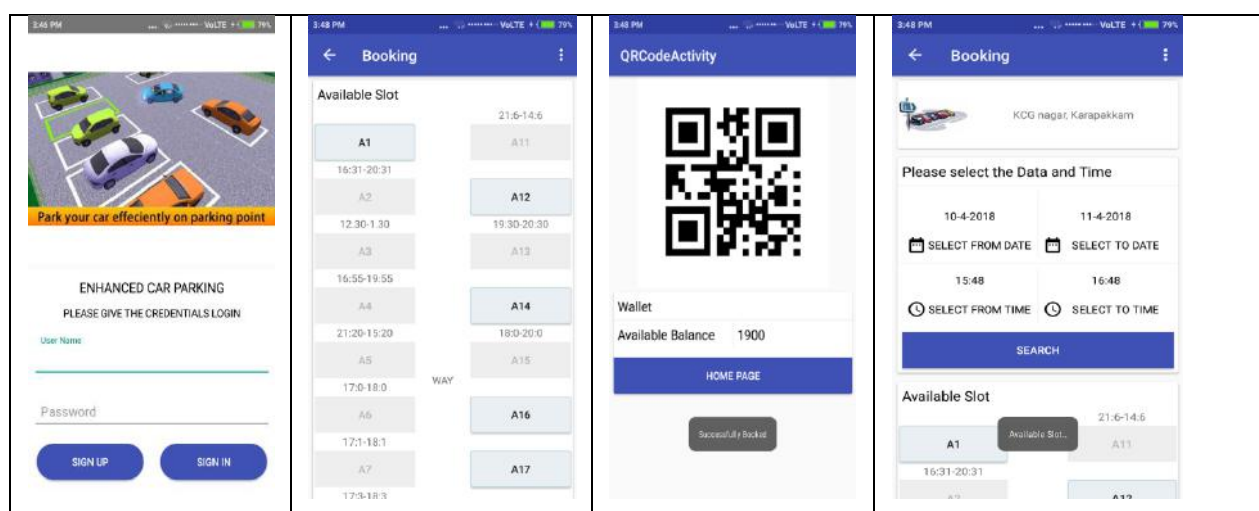
Detection and Removal of Spoofed Data Using Vanet

Project Members:311014205004 - Amudhavalli D. &311014205015 - Logeshwari P.

Project Supervisor: Ms. Tina Susan Thomas, Assistant Professor, , Department of IT

Description : To design and implement a system for communicating the vehicle in a secure way. In other words , the spoofed and masked events are detected and removed while transmitting data in VANET. Our project deals with sending secure data information from one node to another through a concept of VANET. In our system each node is assumed as a vehicle with having GPS and sending data packets in a secure way

using "continuous wavelet transform method". During transmission from source node, many intermediate nodes collect those information packets and sends to destination node within the cluster range. A wavelet transform methodology is used which counts the points for every node. Since attacker concentrates on single link connectivity it gets less points.
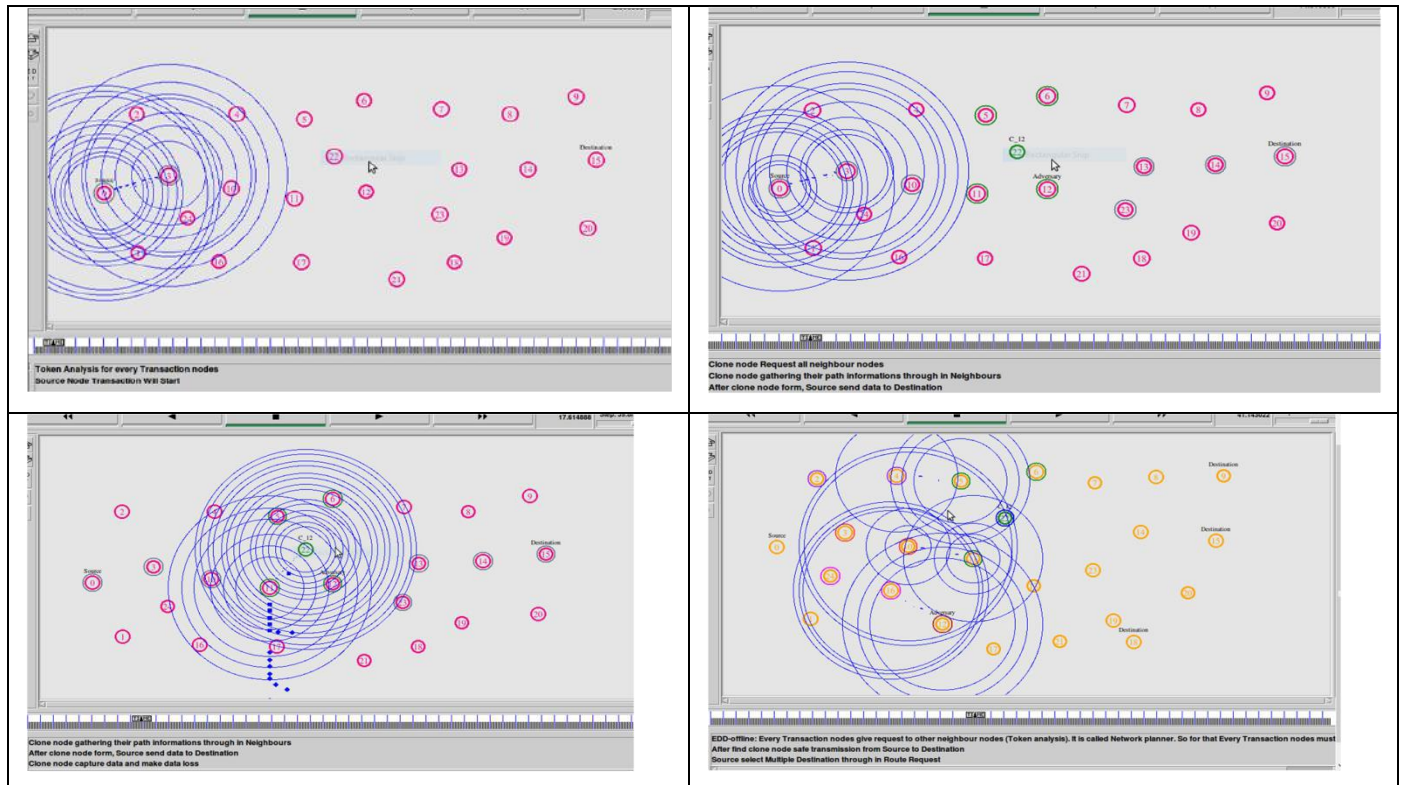
Four Wheeler Detection and Traffic Prevention on One Way Road

Project Members:311014205003 - Amreen S. & 311014205011 - Divyapriya V.

Project Supervisor: Mrs. A. Anju, Assistant Professor, Department of IT

Description : The main intention of doing this project is to detect the four wheeler vehicle in the KCG road. During the college hours the bus drivers are facing much problem due to the vehicle coming in the opposite direction. To prevent this situation we propose this system for the college bus drivers who can move freely and reach the college on time. To make the college bus move freely in the college road without any time delay to reach the college on time. This system can alert the bus driver about the heavy vehicle present in the road and doesn't allow any vehicle to pass through that way. In proposed system the HC-SR04 ultrasonic sensors are used to identify the four wheeler. The

sensed information is passed to the other end using HC-12 medium which covers about 1.8 km. The signal on the other end is changed to red.

| Functional Block Diagrams | Hardware Device |
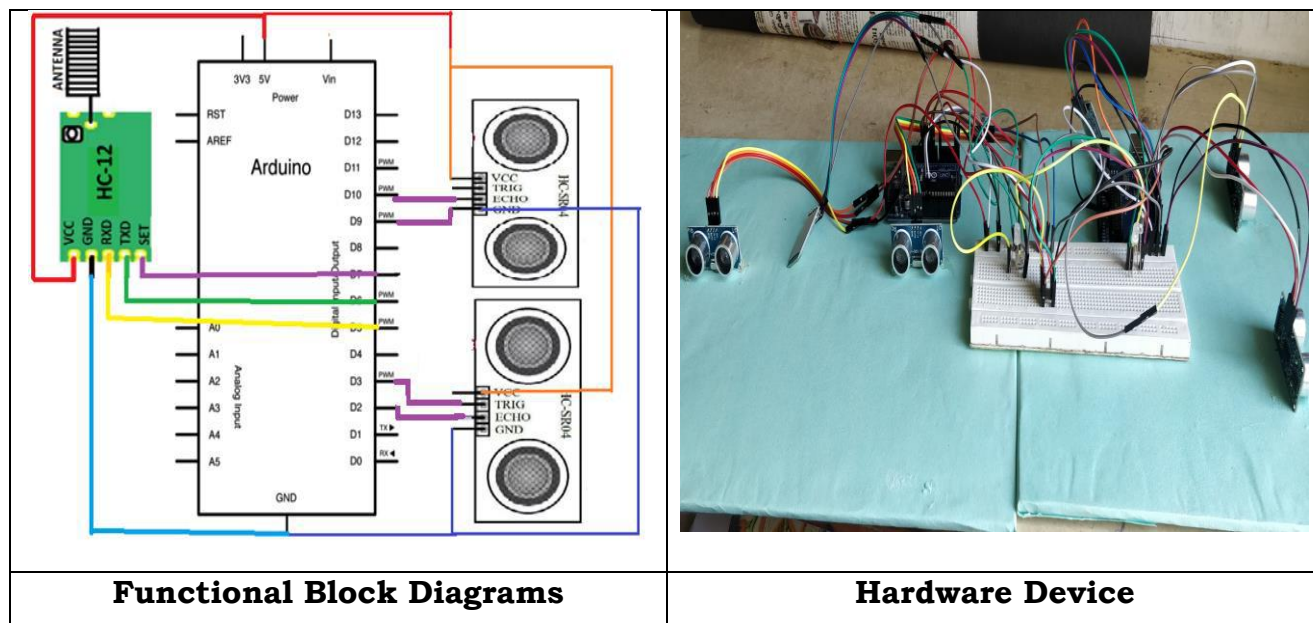
Soil Testing

Project Members: 311014205005 - S. Aswathy, 311014205018 - S. Manimegalai, 311014205020 - M. Maria Rashmi

Project Supervisor: Dr. J. Frank Vijay, Professor and Head, Department of IT

Description : Many such agricultural parameters are being monitored remotely to improve quality of farming. Hence the smart agriculture plays a vital role in promoting cultivation. It gives the solution by means of placing the sensors like pH sensor, moisture sensor and light sensor which gives the fertility of soil in the cultivation land to measure the soil efficiency. In the proposed system we determine the average percentage of basic soil nutrients Nitrogen, Phosphorous and Potassium and determine the suitable crops for the particular soil type. The system will analyse soil nutrient content at real time and make crop prediction. System will also suggest the crops on basis determined pH ,moisture of soil and light conditions of the environment. System will be built on Arduino along with various sensors and GSM or GPRS shield for arduino.

Screenshot for Arduino Setup	**Screenshot for Soil Testing**
Soil Test Screenshot	**Results - Soil Test Screenshot**
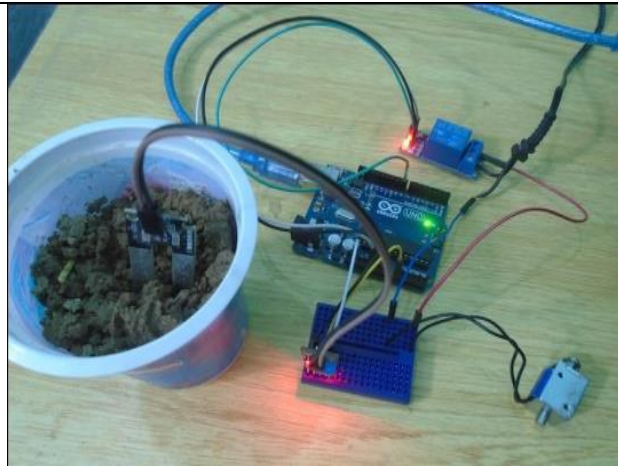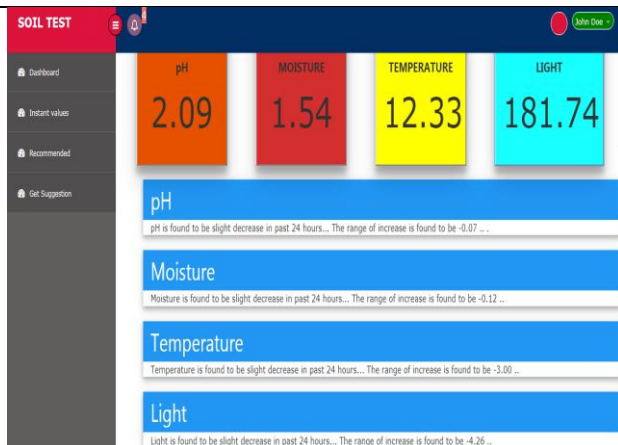
Mobile Surveillance and Security

Project Members:311014205038- Vishnu P.

Project Supervisor: Mrs. A. Anju, Assistant Professor, Department of IT

Description: Mobile Surveillance and Security is a mobile phone based communication application. Often the people who need to be aware of their mobile events are in a remote location. Here the same is to giving the notification to the user whenever they want to communicate with their mobile virtually. This application proved to get the recent call logs details when you sent a command as message to the device. And the user can change the profile mode of their mobile threw passing commands profile modes such as Silent, Normal and Airplane mode can be change threw passing commands. It is used on Business point of view surveillance and Security. If the user need to surveillance his mobile and he need to access the last message, the recent call logs which may be

important or you need to access the contacts our application will get such information and pass them in the text message format to the commander mobile.
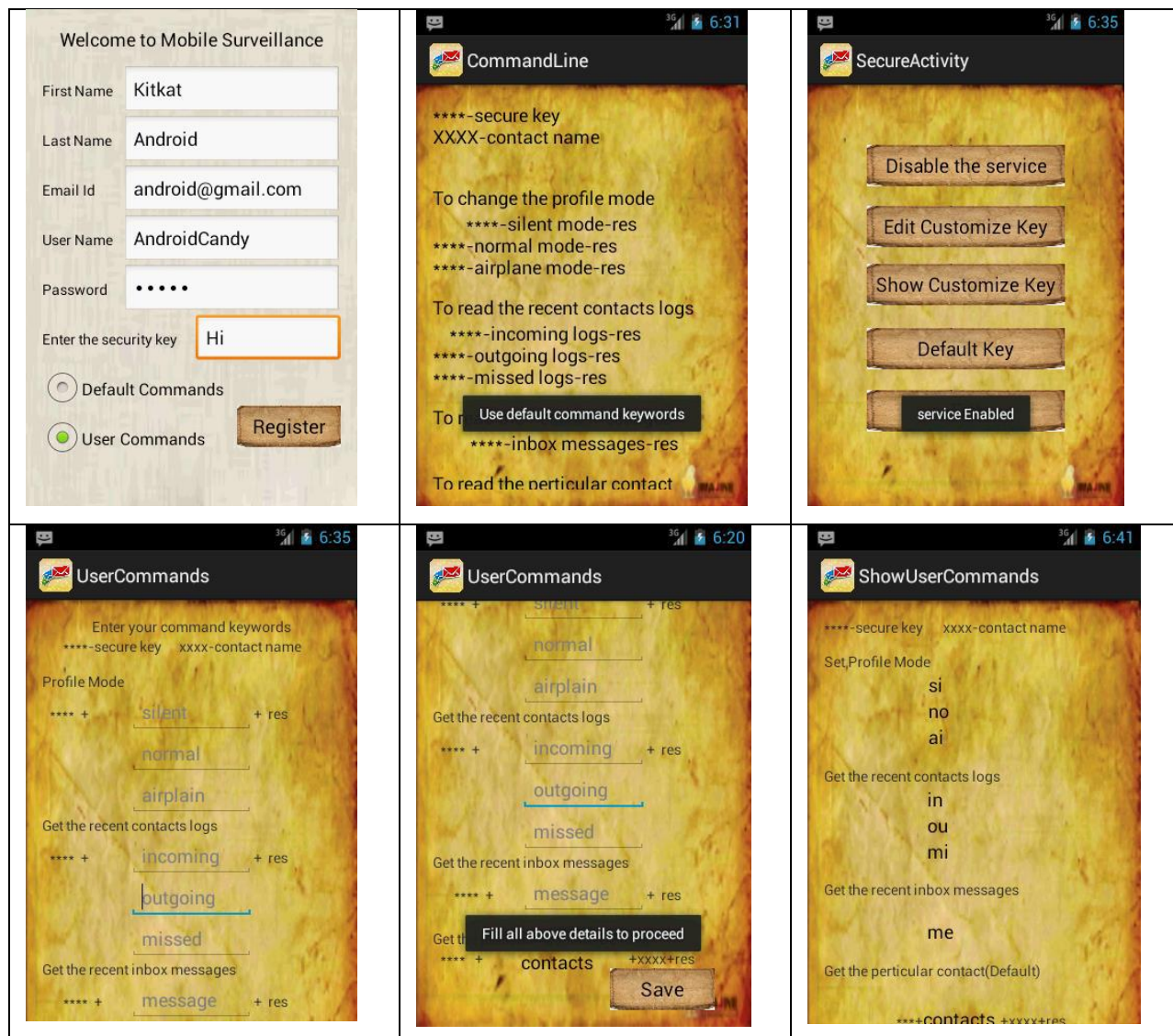
Department Management Information System

Project Members:311014205021 - Muthu Rama Krishnan M. & 311014205009 - Dhinakar A.S.

Project Supervisor: Mr. M. Baskar, Assistant Professor, Department of IT

Description: The proposed system includes various functionalities of a Engineering College Department that are integrated together to a single app.

Timetable Scheduling: Timetable scheduling is done manually and it is one of the tedious problems in the academic institutions. Creating a timetable without any clash or

conflict is very difficult when done manually. So, this system automates such kind of difficult problems with a single click.

Result Analysis: The exam result data is usually available in a spreadsheet format. Each class will have a separate result sheet data. So there will be many spreadsheets. The comparative result analysis will become a complex process. In the proposed system the comparative result analysis is made easier. The result sheet is uploaded to the system and the system makes a comparative analysis.
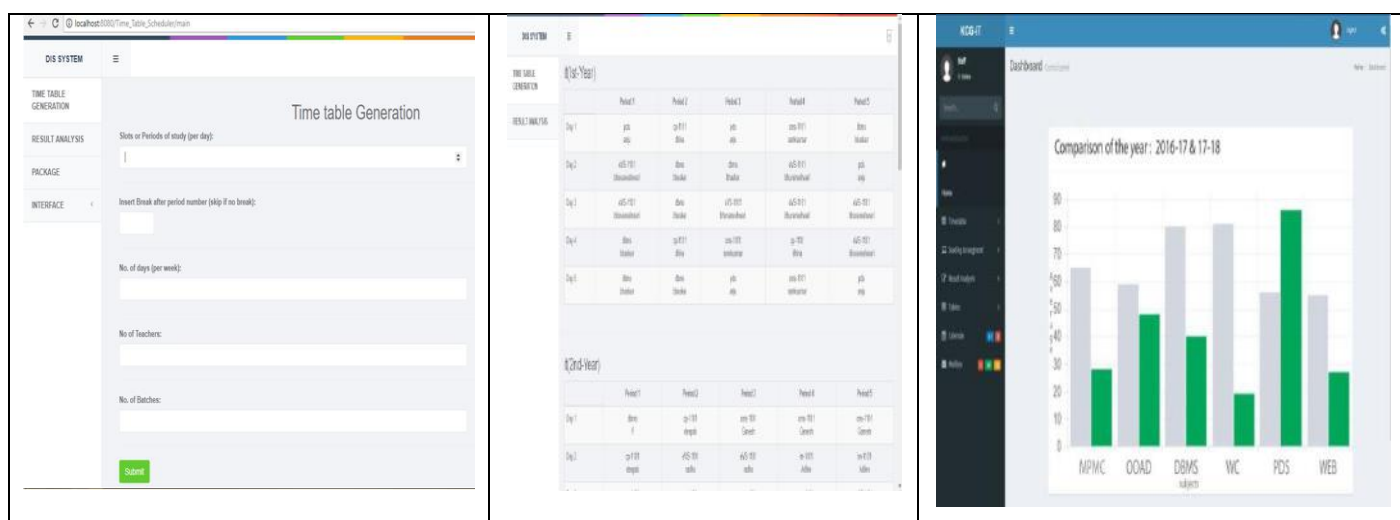
Online Taxi Fleet

Project Members:311014205008 - Deepak T.

Project Supervisor: Mrs. R. Adline Freeda, Assistant Professor, Department of IT

Description: This project is intended to provide the users to search cab for a particular location here. Users required to enter source, Destination, &place where he wants to go. The subsystem should provide a high level of security and integrity of the data held by the system, only authorized personnel of the company can gain access to the company's secured page on the system. This project is intended to provide the efficient easiest taxi service system to the passenger to provide an comfortable journey on their door step. This project intends to introduce more user friendly in the various activities such as record updating, maintenance, and searching. The objective and scope of my project Online Cab Hiring System is to record the details various activities of use

Design and Implementation of a Model to Retrieve Safety Information of Moving Vehicle

Project Members: 311014205017 - K. Mahalakmi & 311014205016 - P. Lydia

Project Supervisor: Ms. Tina Susan Thomas, Assistant Professor, Department of IT

Description: It is commonly known that the accidents are increasing in our day to-day life. Using the proposed system if an accident occurs, we can extract the license plate of the victim's vehicle. And these data can be transmitted to the server using IOT. The information of the vehicle will be stored using IOT. Hardware interface consists of microcontroller and PC. The PIC controller is used to store the license plate number of the vehicle using UART Communication protocol. The PC is used to have the MATLAB software to extract the license plate number of the vehicle. The information about attacker or a person who cause the accident will be found out easily. Once the controller receives the data, the collected information gets stored in the server using IOT and it can be monitored from anywhere using internet.

Confidentiality Preserving Using Crowdsourcing for Android Users

Project Members:311014205022 - Narendra Eswar G. &311014205040 - Yashwant Rahul C.N.

Project Supervisor: Mr. N. Bhaskar, Assistant Professor, Department of IT

Description : This project proposes an Android application to find whether a third-party application is safe to use or not in your mobile. It has two modes: Probation Mode and Trusted Mode. Application runs only in the probation mode. The permissions for the third-party application will be given by the user and then it will be stored in the database. If the user gives the trusted mode it directly installs the application. The permissions given by the user are been analyzed based on the expert rankings and rating whether to accept the third-party application for installation or reject it. The user will get recommendations about the application whether to install the application or not to install the application. The Crowdsourcing application is implemented on Android phones and demonstrates that the system is feasible and effective through real users experiments.
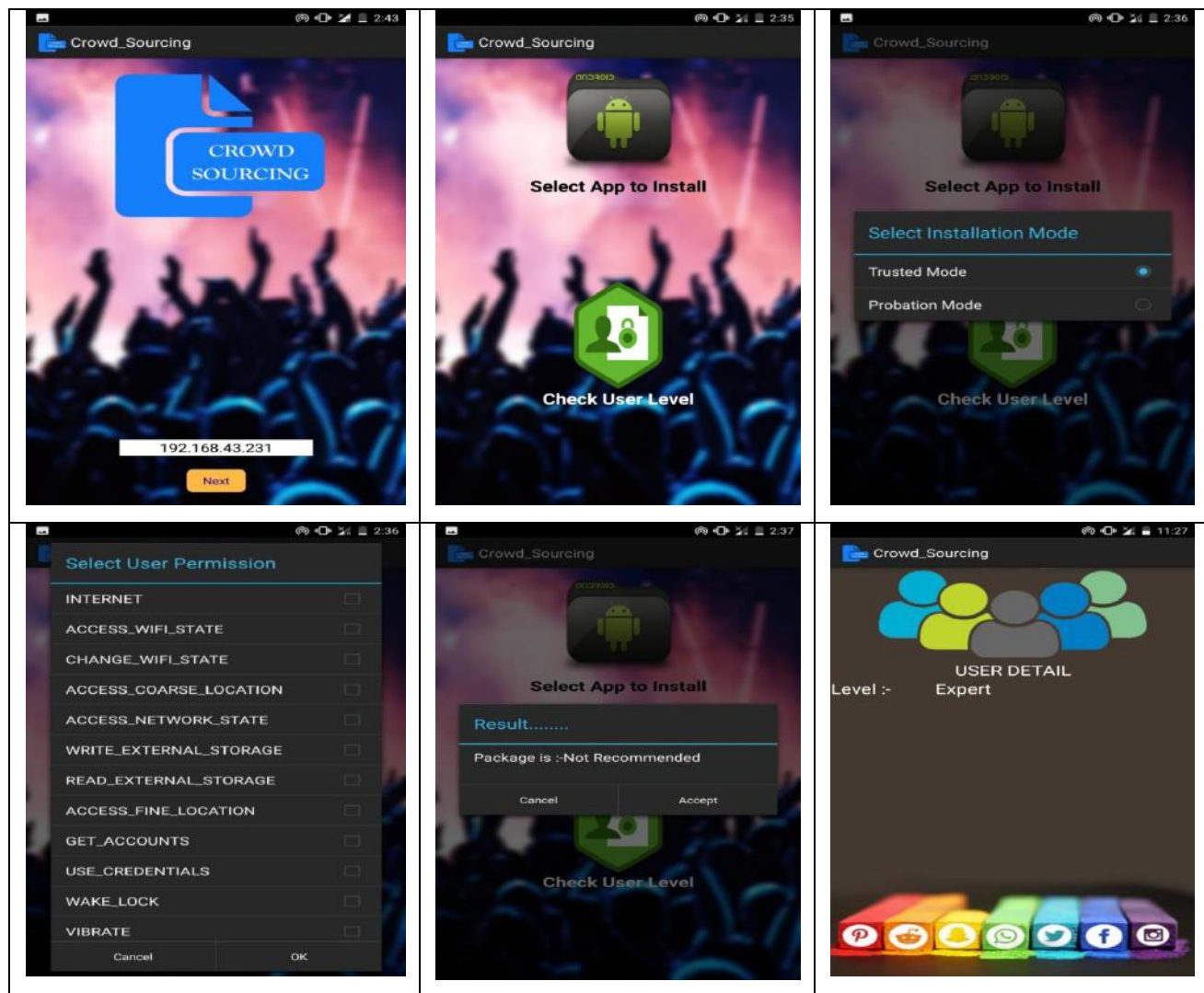
FRIDAY

Project Members:311014205025 - Perinban P. & 311014205037 - Vimalraj V.

Project Supervisor: Dr. R. Anand, Associate Professor, Department of IT

Description : The main idea of the project is to develop the 3D indoor navigation system for the KCG college campus on the Smartphone. This approach uses data from device's wireless adapter and inertial sensors to determine the user's precise location. Previous researches conducted in this field produced the output of two meter accuracy. After the user's location has been localized, a routing algorithm has been introduced to calculate the shortest path to make the navigation simpler. A database is maintained to store and retrieve the user's surroundings and locations. Then, the 3D design is imported to an app. This app is designed as an hybrid app. This approach for the 3D indoor navigation system shows the future assurance that it can be used in malls, hospitals, and college campuses.
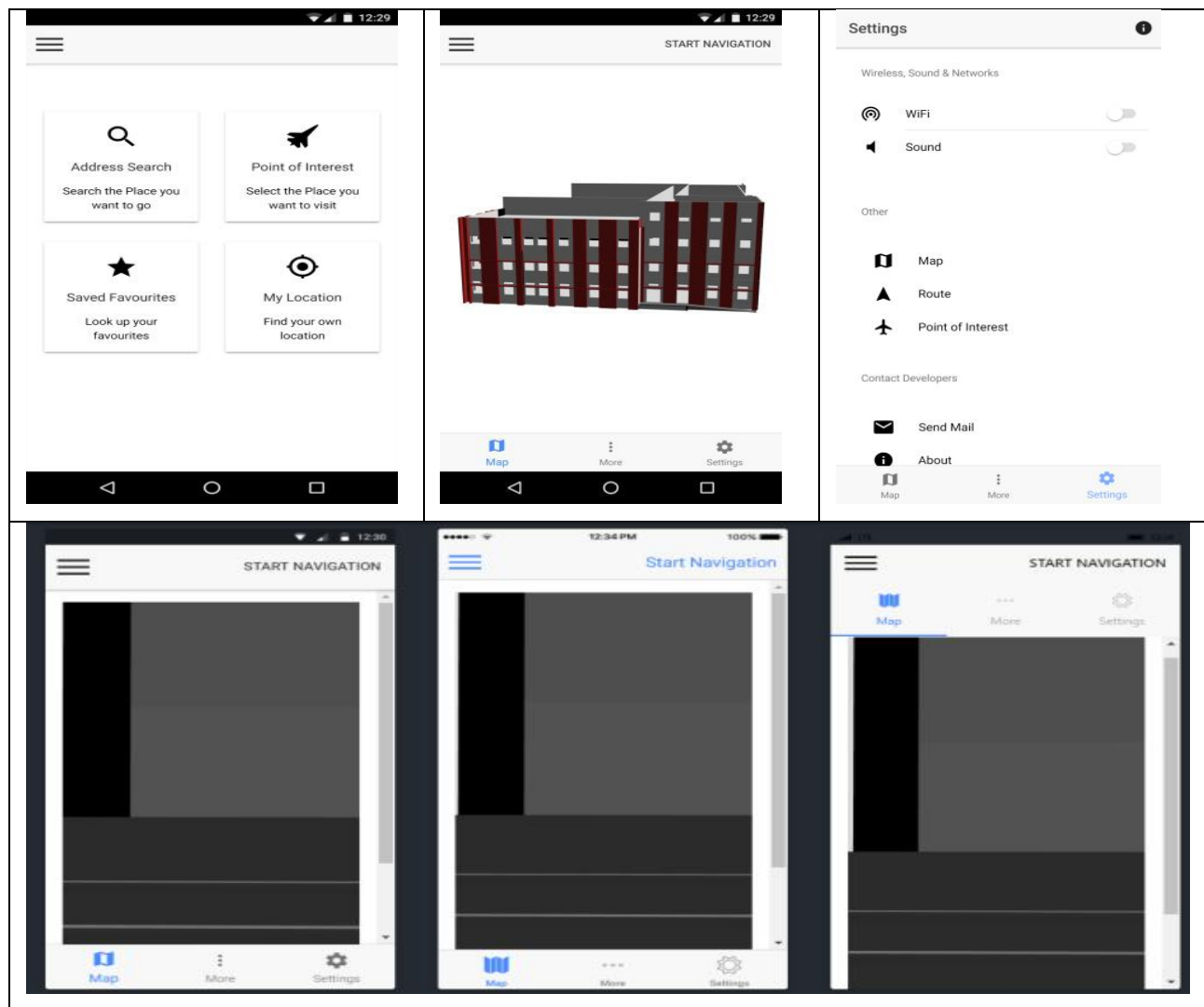
A Productive DDOS TCP Assault and Aversion Framework in Cloud

Project Members: 311014205028 - P. Pritikha & 311014205035 - S. Sruthi

Project Supervisor: Mr. M. Baskar, Assistant Professor, Department of IT

Description : This proposed system is for detecting and preventing DDoS TCP flood attacks (CS_DDoS) in public clouds. The proposed CS_DDoS system offers a solution to securing stored records by classifying the incoming packets and making a decision based on the classification results. During the detection phase, the CS_DDOS identifies and determines whether a packet is normal or abnormal that originates from an attacker. The IP address from which it originates is blacklisted. It prevents the server from DDoS attacks which leads to bandwidth consumption, exhaustion of resources and provides high security to the stored records in the cloud.
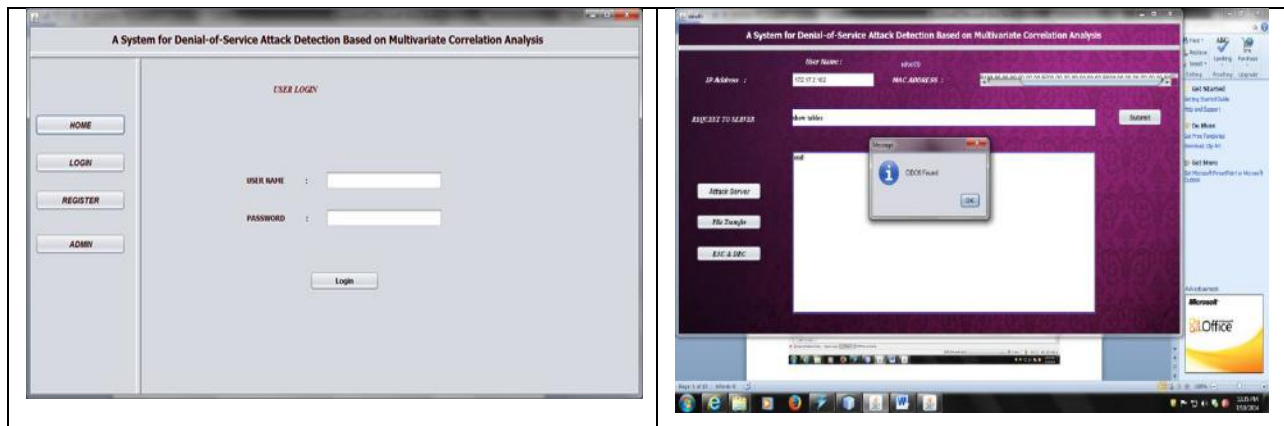
Smart Mobile Application for Electrical Defects

Project Members: 311014205030 - Reshma U. & 311014205033 - Sowndarya S.

Project Supervisor: Mr. Sreekantha Kumar V.P., Associate Professor, Department of IT

Description : The main objective of the Smart Mobile Application for Electrical Defects is to make timely delivery and appropriate action about the electrical defects occurring anywhere in the public places. While reporting the Electrical Defects the user will have to attach a detailed description about the defect spotted, an image of the defect and Location of that place will be automatically detected using the Global Positioning System (GPS). There in the cloud database the defects reports will be prioritized using the priority scheduling algorithm based on the priority assigned to the case of defect, the immediate alert will be given to the Electricity Board official as an emergency alert alarm in the mobile phone, if the EB official is offline, using alerts then a phone call and details will be sent through SMS to the EB official. After rectifying the defect, a feedback will be given to the User who reported the defect.
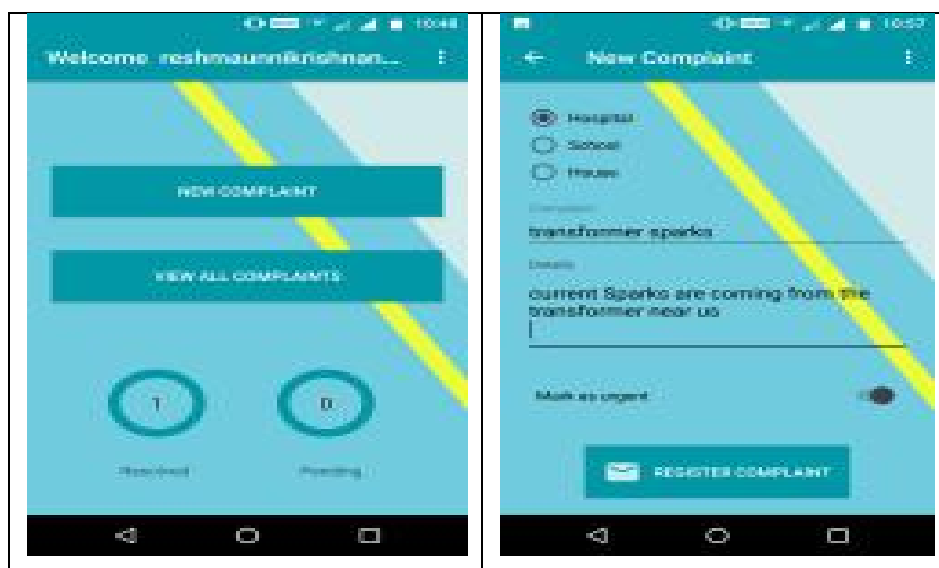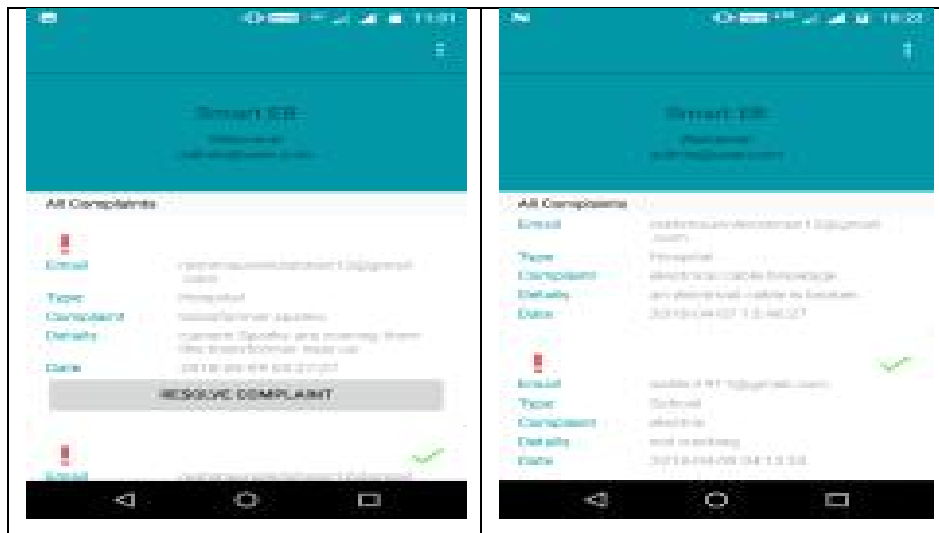
Techie.ai

Project Members: 311014205026 - Pranamya G. & 311014205039 - Yaminee K.

Project Supervisor: Mrs. A. Anju, Assistant Professor, Department of IT

Description : Techie.ai works on the basis of AI and helps users find appropriate answers to their career related questions. It is a Career Guidance Bot built using Artificial Intelligence algorithms that are used for analysing user's job search requests and queries. It provides appropriate results to the query of the user. The user does not have to personally go to career counsellor for the same. The system analyses the question and provides answers to the query as if it is answered by the counsellor. This system helps the user to choose the right career that matches their skill set. It has a user interface through which user can communicate with it to pose any queries related to career.

Moving Object Segmentation and Classification of HEVC Compressed Video

Project Members:311014205029 - Reeshma M. &311014205036 - Subhashini K.N.

Project Supervisor: Ms. Krithikaa Venkat. V.S., Assistant Professor, Department of IT

Description : In this system, run a video at real-time to segment and classify moving object using HEVC video surveillance. The reliability information along with the MV magnitude is used to segment foreground objects from the background. Firstly, MV interpolation for intra-coded prediction unit (PU) and MV outlier removal are employed for pre-processing. Then, blocks with non-zero motion vectors are clustered into the connected foreground regions by using the four-connectivity component labeling algorithm. Finally, object region tracking with temporal consistency is applied to the connected foreground regions to remove the noise regions. The boundary of moving object region is further refined by using the coding unit (CU) and PU sizes of the blocks. For person-vehicle classification, it involves a training phase to learn the person-vehicle model using "bag of spatiotemporal HEVC syntax words" and a testing phase to apply the learned model to test videos.
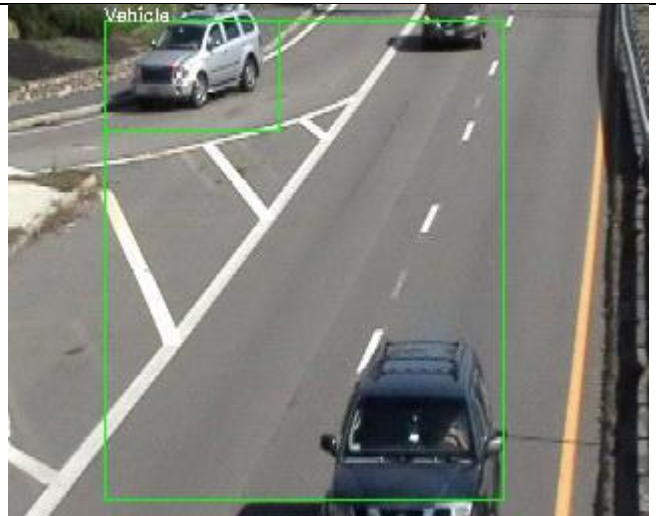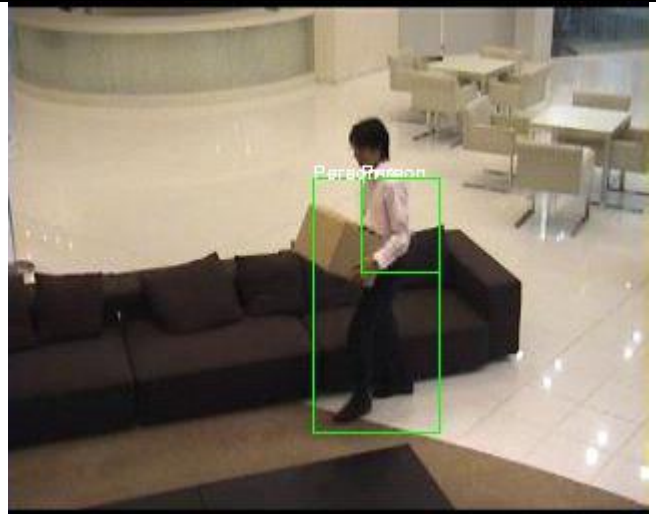
A Time Specified Data Self-Destruction Scheme in Cloud

Project Members: 311014205034 - Sriram M.

Project Supervisor: Dr. R. Anand, Associate Professor, Department of IT

Description : In this proposed system of time specified constraints for each file or data uploaded by the data owner in cloud. Time interval will be send to user. And key generation will be done by Admin where unique key will be generated to each user. When the time interval ends data will be self-destructed from cloud. In this project data user can access some file from the cloud server in between the particular time interval. Time allocation of each data will be maintained by data owner in the time server. Data will be self-destructed and no one can decrypt it because of the expiration of the secure key. Therefore, secure data self-destruction with fine-grained can be achieved.

Mobile Application on Excess Food Donation and Analysis

Project Members:311014205031 - SAHLIN AHAMED M.S.

Project Supervisor: Mrs. R. Adline Freeda, Assistant Professor, Department of IT

Description : The project is a Android Application that uses data analysis to visualize the impact of excess food, thus reducing food wastage. It also enables to give away the excess food produced by Notifying The Nearby Users (NGO's , Volunteers) with details of the food available. Required Userscan claim it and it gets Allocated Based on Priority. The registered users have two options they can choose from, either they can donate the excess food or they can claim the donated food.
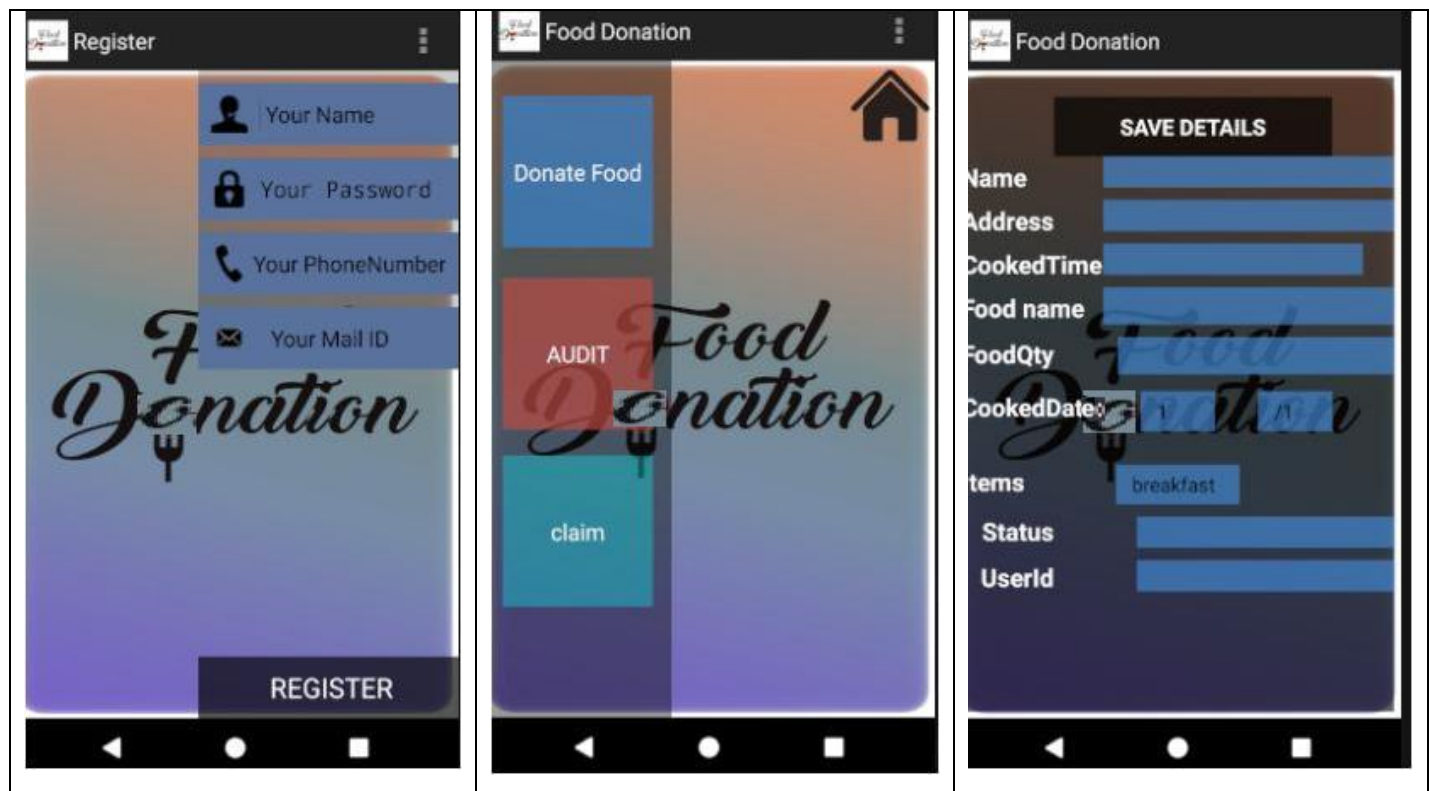
Crowdsourcing Based Disease Analyser

Project Members:311014205007 - Bhuvanesh E.

Project Supervisor: Mr. N. Bhaskar, Assistant Professor, Department of IT

Description : To reduce the lack of security of data stored in cloud, propose a time specified scheme to remove the outsourced data in cloud. A data owner can upload the file with certain time interval. Data user should access the file within the time interval. This system has an admin to assign secret key to each user to access the file from the cloud. The time specified scheme used in this system will allow data owner to set time interval for each data uploaded. After the time period the file uploaded will get self-destructed.
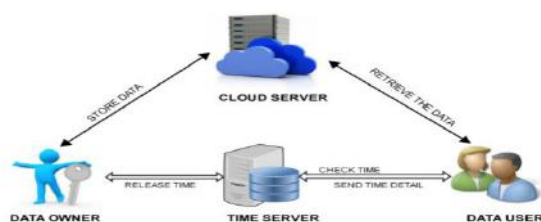
Process Based Online Learning Application with Offensive Content Detection

Project Members:311014205010 - Dinesh B.

Project Supervisor: Mr. Sreekantha Kumar V.P., Associate Professor, Department of IT

Description : Web Application to share the technical contents over online for learning with detection of illegal or offensive contents. A Machine Learning concept used to build the interface to detect the illegal & offensive content posted by the user. Main cause is to prevent the users being exposed to illegal contents through the application. To prevent the application being misused and a step automate the content processing in the application. To allow the users to post the contents they want to share with others through the application and to automatically process the content to check for offensive content through machine learning API's.
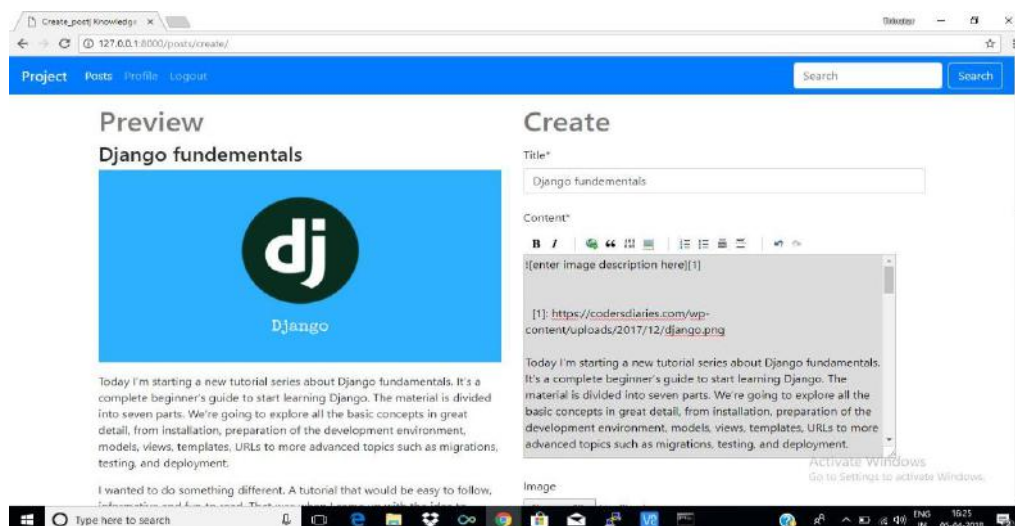
Post Query

which is the best site to start of with java?

via deepak | 1 minute ago | 1 comment | Answer | View Comment
javatpoit.com

-via deepak | 0 minutes ago

tutorialspoit.com

Reply

which is the best site to start of with java?

-via deepak | 0 minutes ago

MINI PROJECT CHALLENGE 2018

The department of Information Technology has conducted a Paper Presentation Competition to the third year students. Projects are generally done as a combined team effort. Two or more students work under a guide or a staff to get a certain results. By doing a project, students will

1. Understand your subject better
2. Get practical experience
3. Chance to showcase your skills
4. Learn about team work, communication skills and responsibilities

1. Car Automation Using Voice Control Mechanism
   Team Members: Naveen .KT
   Saranya .S
   Srinidhi Srinivasan

   Abstract: The project is to automate a car using voice command. This is like an interaction between car and the user. Voice control is a mechanism/method of controlling any sort of things by Voice or Speech. Voice Recognition is for security purpose.

Receiving certificates from Dr. Sambandam, Advisor – Electrical Sciences

2. HOLA! A Nutrition and sentiment assistant
   Team Members: Nishanth K.R.,Praveen Raj. M,Sudharshaun .M,Arun Pandi .M
   Abstract: Hola is a Health assistant

Hola is a personal chat assistant which tells the user what to eat according to their diet plan.

It also tells the nutrient content in the food consumed by the user.

Hola is a Mental assistant

It can help the users in a predominant way by providing mental support. It can understand all the emotions from happy to sad, joy to sorrow.

It sometimes gives your ideas to make yourself occupied.

It is even more than that

Once the user enters the BMI it creates a diet chart.

3. Smart Air Monitoring System

Team Members: Ganesh N,Joseph Dhanraj ,Keshav M ,Vignesh B

Abstract: The aim of the project is to create an device that measure's the quality of air and alert user through buzzer and led light. The buzzer sounds and led light blinks to alert user when the quality of air gets reduce to certain reading in ppm (parts per million).

Prototype Model – SMART Air Monitoring System

4. SMART GARBAGE MANAGEMENT

Teams Members: Gopinath S,Vignesh L ,Vishwanath Revanth M ,Revanth S

Abstract : To protect environment it is necessary that garbage collection system has to be smarter and easy accessibility to respective authorities.

Receiving certificates from Dr. Sambandam, Advisor – Electrical Sciences

5. Smart Attendance Recorder

   Teams Members: Gaurav Vashistha ,Mukesh Kumar, Tejaswi Trivedi, Hussain Sabir Patanwala

   Abstract : Smart Attendance Recorder is a tool which will allow user to get attendance of the pupil. This tool helps to provide a hassle free environment which will eliminate paper work.It also provides a new way of attendance taking methodology in which the pupil and the staff inside the class are least disturbed.

Best Project Award:

1. Project Title: Car Automation using Voice Control Mechanism
   Guide: Ms. Krithikaavenkat
   Students: Naveen K T, Srinidhi Srinivasan, Saranya S
2. Project Title: Smart Garbage Management System
   Guide: Mr. N Bhaskar
   Students: Gopinath S, Vignesh L , Viswanath Revanth M, Revanth S
3. Project Title: Smart Attendance Recorder
   Guide: Mr. V P Sreekanthakumar
   Students: Hussain Sabir Patanwala, Mukesh Kumar, Tejaswi Trivedi

Feedback Note of Panel Members:

All the students had actively participated and a few students had worked beyond their level. Students had shown a very good interest in exploring their knowledge and improving their presentation skills. They appreciated us for the initiative taken to conduct various technical activities for the students. They suggested that students can also select some advanced technologies like App in iOS, include security parameters etc. It would be better if they could improve their communication skill also.

Honouring the Guests

Dr. J. Frank Vijay Honouring the Chief Guest

PAPER PRESENTATION COMPETITION'17

The department of Information Technology has conducted a Paper Presentation Competition to the third year students. The main motto of the presenting paper is to bring students out of stage fear and also improve their communication skills. It also provides you an opportunity to learn in detailed about a core subject which is a part of curriculum and develop effective presentation skills. Paper presentation plays an extravagant role in the student's life. There are many advantages of presenting a paper. Presenting a paper is very difficult but in the end seems to be very simple and easy. To present a paper we need to have maximum of two or three participants and each and every participant will be awarded with a certificate. Paper presentation plays a predominant role in this modern world, especially BTech students should add flavor of presentation skills to their resume as a good company look for it. In addition to studies other activities are also important; paper presentation is one among those activities and is very much required in today's world. In this competitive world we must explore every nuke and corner in order to get success and better opportunities.

Short Listed batches for the Final Round

1. **Paper Title: Big Data Security**
   Team Members: Nishanth K R, Sivabalaji, Praveen R
2. **Paper Title: Prediction of Heart Disease using Big data Analysis**
   Team Members: Sudharshaun, Arun Pandi, Pravin Raj
3. **Paper Title: Human robots**
   Team Members: Srinithy Srinivasan, Saranya S
4. **Paper Title: Nano Robotics**
   Team Members: Atchaya , Praveena R
5. **Paper Title: Smart Farming Using IoT**
   Team Members: L Vignesh, B Vignesh, Keshav , Joseph Dhanraj
6. **Paper Title: Data Encryption**
   Team Members: Aswini, Visudha, Naveen K T
7. **Paper Title: Li-Fi**
   Team Members: Ganesh, Revanth S
8. **Paper Title: Home Automation using IoT**
   Team Members: Priya, Induja, Nishanthini

9. **Paper Title: Smart Hospital**

   Team Members: Revathy, Khadheeja Niyas, sorjeeta Gupta

Preliminary selection:

- The preliminary selection was done on 2nd and 3rd of August 2017
- The presentation was done by 18 batches of 3rd year IT Department.
- Out of 18 batches 9 set of batches were short listed to the final round based on the Paper Concept and Presentation.

Final presentation:

- The final presentation was held on 31:08:17.
- Venue: Steve Jobs Lab
- Chief Guest : Dr.S. Veena (Professor/ Department of CSE, S.A Engineering College)
- Presentation timing: 11.00 am to 1.45 pm
- Each batches presented a maximum of 10 - 15 minutes.
- Out of 9 batches 3 batches were selected for Best Paper Award.
- The presentation was done in a well efficient way with the support of the Head of the Department Dr.J. Frank Vijay and the coordinator Ms. Anju.A /Assistant Professor.

Best Paper Award:

1. Paper Title: Nano Robotics
   a. Guide: Ms R Adline Freeda
   b. Students: N.Atchaya, R.Praveena
2. Paper title: Smart Hospital
   a. Guide: Ms.Anju.A
   b. Students: Sorjeets Gupta,Khadheeja Niyas,Revathy S
3. Paper title: Human Robots
   a. Guide: Dr.J Frank Vijay
   b. Students: Srinidhi Srinivasan,Saranya S

Students Presenting their ideas in the Paper Presentation Contest 2017

Feedback note of Chief Guest:

Students had shown a very good interest in enhancing their knowledge and improving their presentation skills. All the students had actively participated and some students had worked beyond their level. It would be a good to conduct various technical activities for the students.
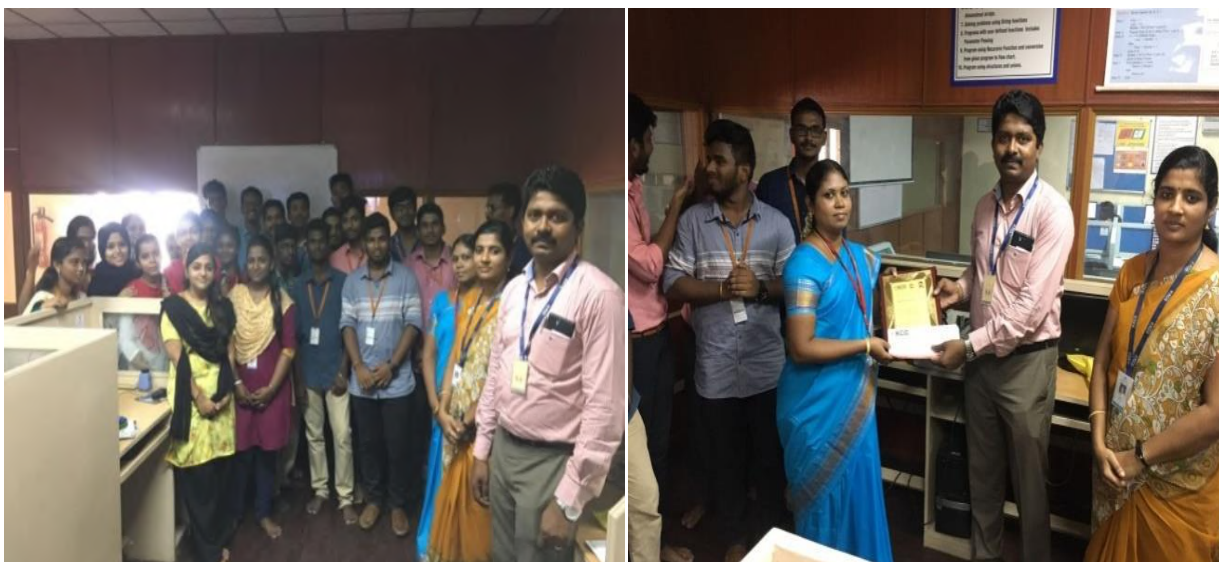
Group photo with the chief Guests & Students

IET PROJECT CHALLENGE 2018 @ KCG COLLEGE OF TECHNOLOGY

KCG College of Technology, Chennai in association with IET Chennai Chapter has conducted an in-house project competition on 10 April 2018 to select best final year project from each department. The event named IET Project Challenge 2018 (IET - Institute of Engineering and Technology - UK), is a competition that provides an opportunity for the students to showcase their final year projects and get them recognized. This competition is organized annually by IET in the month of April. The IET intends to provide a platform, where students can exhibit their projects and gain an industrial exposure by having their projects judged by a panel of experts from the research and development field. This tear the CSE & IT projects were evaluated by Mr. Kumar Sachidanandam, Co-founder, Ydealogy, Mr. Dinesh Varadharajan, Vice President – OrangeScape & Mr. Rajaraman Santhanam, Co-Founder, Chargebee. The event was inaugurated by Dr. G. Prabhakaran, Principal in the presence of all HODs, Mr. S. Cloudin, Faculty Advisor (IET Student Chapter), and Mr. V.P. Sreekantha Kumar, IET-Coordinator. The projects were represented from the departments of Aero, Civil, CSE, ECE, EEE, EIE, IT, and MECH.

Photo Gallery – IET Project Challenge 2018

Information Technology Students presenting their projects to the jury member

Information Technology Team – Project Challenge 2018

Results of IET Project Challenge 2018:-

1. Ms. Pranamya.G. & Ms. K. Yaminee won First prize for the project titled "Techie.ai" guided by Ms. A. Anju.

2. Ms. Reshma.U & Ms. Sowndarya.S. won second prize for the project titled "Smart Mobile Application for Electrical Defects" guided by Mr. V.P. Sreekantha Kumar.

Industry Institute Interaction

In-House Project:-

About EMS Project:-

EMS Project is an Energy Monitoring System. EMS system would collect the information regarding power utilization of each department with various parameters. The project was developed by Department of Electrical Electronics Engineering . Infomration Technology department had developed a Website and Android APP for this project.

Web Site URL: http://kcgit.in/ems
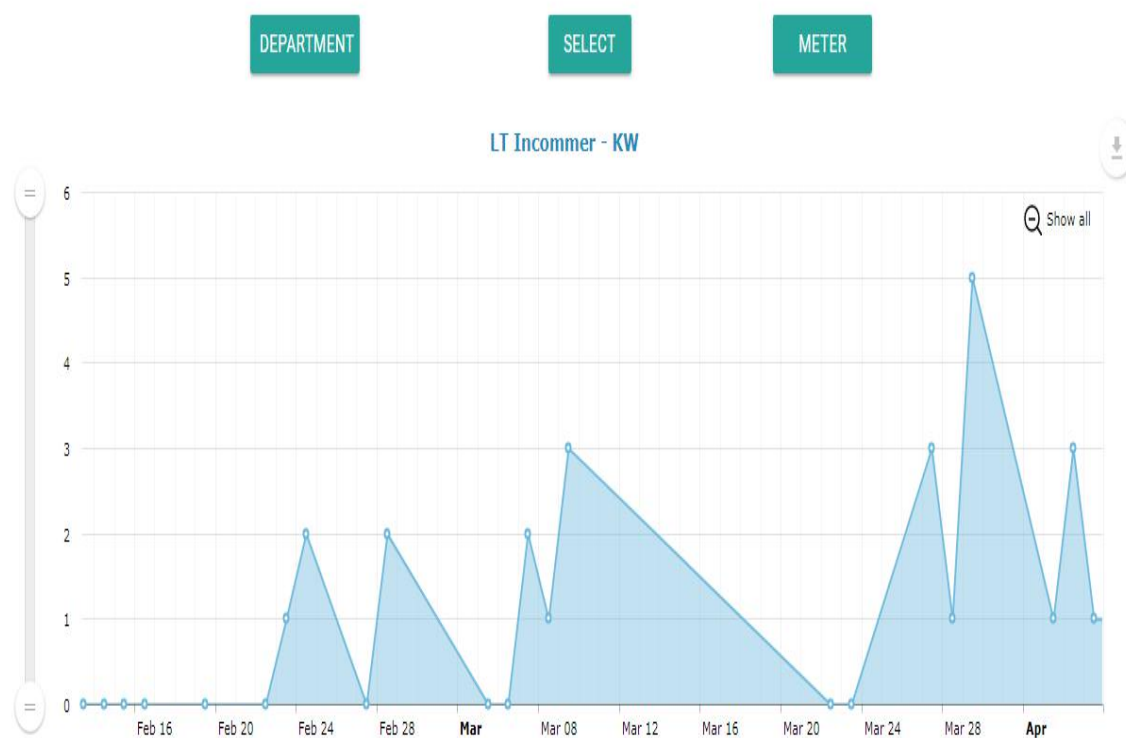
Report on "Servion – KCG Academic Partnership Meet 2017"

Dr.R. Anand, Associate Professor & Ms.R. Adline Freeda, Assistant Professor – Selection Grade, KCG College of Technology attended "Servion – KCG Academic Partnership Meet 2017" at their venue on 04-08-17.

Servion enables business transformation for enterprises in the area of customer experience management (CEM). Servion is platforms led solution provider which is

focused on enhancing the customer experience by automating & integrating customer interaction channels. Servion's IP platforms ServDesignSM, ServIntuitSM, ServInsightsSM, ServCloudTM and ServCareSM enable enterprises to drive the true value of their CX investments and build their Customer Engagement Hub.

Over the past two decades, Servion has evolved from being a single channel (voice) interaction expert to being an industry pioneer in omni-channel customer experience. Servion'somni-channel solutions empower enterprises to address the customer experience expectations of the millennial customers and manage over 10 billion customer interactions annually across 60 countries in 6 continents.

Discussions were done on the Following Areas:-

1. CCNA Course
   2. IVR – Component – Working Principles
   3. VMWare Exposure

Servion - KCG Academic Partnership Meet 2018

CoE on Application Engineering Services with Virtusa

It is indeed heartening to note that the department of Information Technology in alliance with the Department of Electrical and Electronics Engineering and Department of Information Technology has applied for Centre of Excellence by Virtusa Pvt Ltd on 19th April, 2018. The verbal agreement sanctioning a centre of Excellence related to Java is very motivating for the department. Both the students and faculty members hope that such a centre of Excellence can indeed augment the academia-industry connect

Team Members involved in Virtusa for Center of Excellence

Internship

"You need experience to get experience." This seems to be the biggest issue for young adults transitioning into the workforce these days. Employers in today's labour market rely heavily on resumes that illustrate a relevant work history, whether that's from internships, volunteer work, or actual job experience. A practical work background carries a major significance when attempting to enter into the job market. For this reason, the department of Information technology took special interest in arranging internship for the pre-final year students. The co-ordination done by Ms. R. Adline Freeda and Mr. N.Bhaskar for the same is highly recommendable. Ms. R. Adline Freeda arranged a one month internship for nine students in TabSquare InfoTech Pvt Ltd from 18/11/2017-15/12/2017. Mr. N. Bhaskar arranged an internship of 15 days for 13 students in CACHII Solutions, Koyembedu, Chennai from 10/06/2017 to 24/06/2017. Apart from these, companies like Infosys, EverG Systems, ZOHO, INTEL, Britannia Cars Pvt Ltd also provide internship for our students. Almost thirty students of the department completed internship in the last academic year.

Report on Internship (15.06.17-27.06.17) at CACHII Solutions Pvt Ltd

The Students of Information Technology (Hussian.S.P, Vignesh.L. , M. VishwanathRevanth, Gopinath.S, Sudharshaun.M, Venkatalakshmi, Ashwini.A., Nishanth.K.R., Shvedha.C, Visudha, Krithika.M&Sivabalaji.U) of 3rd year had done internship from 15th June 2017 t o 27th June 2017.

The Team Members (Nishanth.K.R.,Sudharshaun.M., Ashwini.A., Venkatalakshmi) had done a web design project for a company. The project is to make a site for a Fitness GYM named "RD GYM", using only frontend web language like Html5 & CSS 3. This is a Single page application which can be viewed by any user who wants themselves to be digitalized. The website can be viewed in any device and it is fully accessible.

The Team Members (Shvedha.C.,Krithika.M., Visudha.V., Siva Balaji.U) had done a project on Web Maniacs. The project is to make a site for a company named "Web Maniacs", using only frontend web language like Html5 & CSS 3. This is a multiple page site which can be viewed by any user who wants themselves to be digitilized.

The Team Members (S. Gopinath, Hussian.S.P., L. Vignesh& M. ViswanathRevanth) had done a project on Web Application Designing (Car4You). Online Car Booking Management System is developed to manage all cab hiring work online. This project is useful for car booking agency that are specialized in Hiring cabs to customers. Using

this system many car-booking agencies are moving ahead to become a pioneer in the vehicle rental industry by completely focusing on customers. Using this system, it is very easy for customer to book a car online and car-booking agency can also track their booking online. It is an online system through which customers can view available cabs; register the cabs, view profile and book cabs. Mostly peoples use cab service for their daily transportations need. Car booking agency can also check which car is free for booking and which cars are on booking at present time. The objective and scope of this project Online Cab or car booking System is to record the details various activities of user. It will simplify the task and reduce the paper work. Using this car booking management system car owner can also become partner of car booking agency by giving their car for booking. Online Car rental management system is a web-based application that allow users to book a car online. From this system car rental company can manage all car bookings and customer information. User can book cars and admin can confirm the booking and cancel the booking on the basis of availability of the cars and drivers.
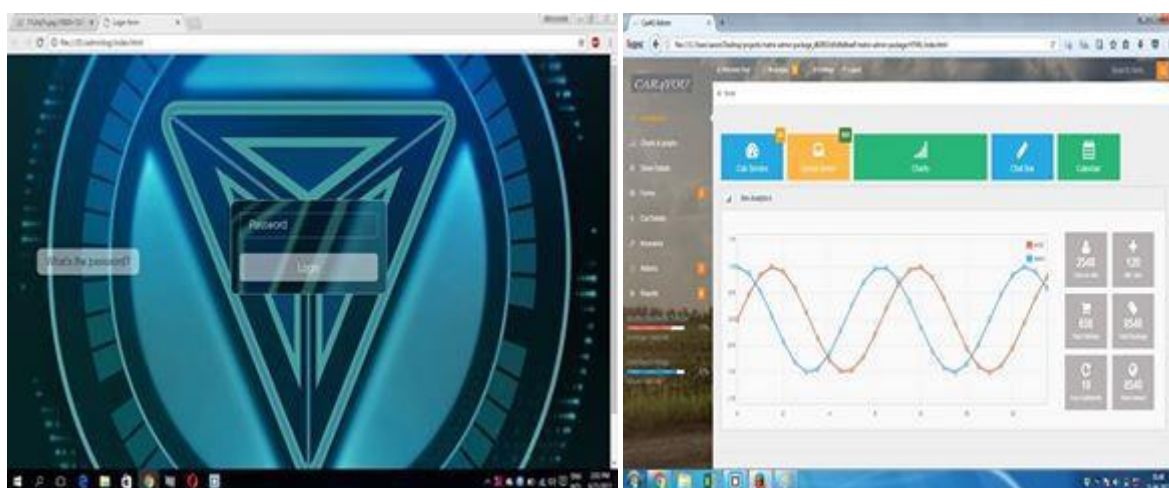
Web Design Projects (Sample Screenshot)

Report on In-Plant Training from 19.06.17 to 24.06.17

Mr. Karthikeyan.J of 4th year Information Technology student, attended an in-plant training program for Engineering Students from 19.06.17 to 24.06.17. The key responsibilities assigned were to learn about various aspects of the Indian Nuclear Power Programme and the role of Kalpakkam Nuclear Power Project(KKNPP). Learning about various aspects of the functioning of the plant.

The participant successfully completed the internship and developed a MATLAB GUI to simulate the control system functions taking the case of steam generator to help new trainees understand the data flow. The main outcomes of training included, learnings on Control systems in nuclear power plants, various aspects of communication (like OSI model and communication protocols.) and development of MATLAB GUIs for simulation purposes. The best thing about the Internship was that it was a great learning experience. It also helped the participant to learn MATLAB in a very effective way and to utilize it fruitfully for development of GUIs for simulation purposes.

Certificate of Mr. Karthikeyan

Report on Internship – Liquids Lab (24-07-17 to 30-07-17)

Mr. T. Deepak of Information Technology, KCG College of Technology attended Internship during the period 24-07-17 to 30-07-17 at Liquids Lab, Bangalore about the Car Parking System. In this project, a microcontroller – or an Arduino board based system – keeps track of the number of cars parked (16 being the max number), shows the number of slots unoccupied, automatically raises the gate arm to allow cars into the parking lot or leave it. Other functions include keeping track of how much time a car has been parked and the time when a driver leaves the parking lot. As an ending process, the microcontroller will calculate the cost of parking for each car parked. When the amount is paid and the parking operator depresses a paid button, the exit arm gate is raised, and one unit is added to the total number of vacant cars in the parking lot. There is only a difference between the microcontroller based version and the Arduino one: in the Arduino version, a RFID module is used to record the entrance of a car into the parking lot as opposed to microcontroller based which detects the parking slot number by checking which limit switch is depressed when any designated car is parked at that slot. The schematic diagrams of all hardware circuits used in these projects are explained as attachment.

Sample Prototype of car parking system – Arduino Based Project

Reporton American Express Internship Challenge 2017 held from 23.06.17 to 25.06.17

American Express is looking for passionate and energetic interns who can join their team in Bangalore & Gurgaon. Duration of internship is for 6 months, and starts in July. American Express is a global services company that provides customers with access to products, insights and experiences that enrich lives and build business success. With $1 trillion in annual billed business worldwide, American Express is an engine of commerce providing innovative payment, travel and expense management solutions for individuals and businesses of all sizes.The challenge was opened from 23rd June 2017 to 25th June 2017. A problem statement was provided in the challenge. Contestant had to build a functional app, Based on the question, it could be a web app, mobile app, desktop app, or any other type of app.

From the Department of Information Technology two students, Mr. Muthuramakrishnan and Mr.Perinban of 3rd year IT had participated for the competition. They participated in this challenge on 25th June 2017 11 AM to 11 PM (12 Hours Hackthon). The challenge was to build a full stack web application within 12 hours with any programming language. It was a great learning experience for the students to compete globally.
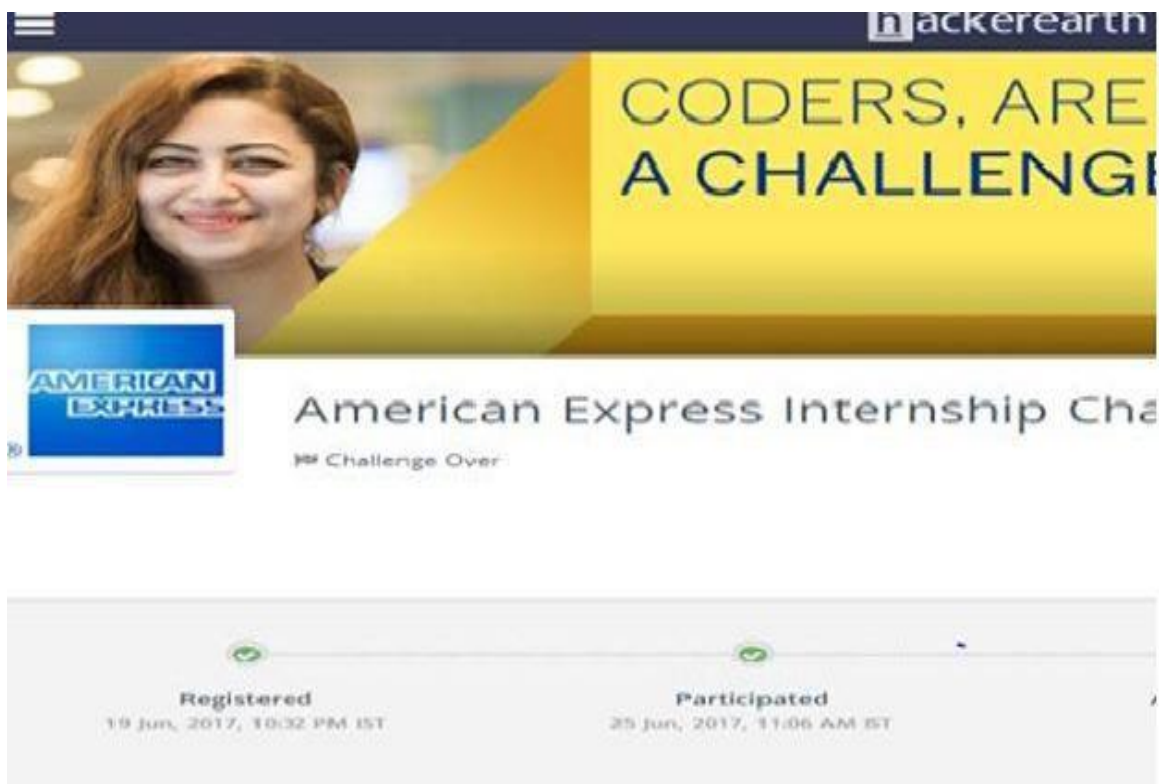
Participation Screenshot of Information Technology Students

Placement Details

The IT department has always been the cynosure in placement activities. The stellar placement record of the department was kept intact by combined efforts of the student and faculty members. The department of Information Technology underscored the remarkable placement record by eliciting superior placement activities in the academic year 2017-2018. Infosys, IBM, ZOHO, IDBI FEDERAL are some of the companies which showed keen interest in our students. The salary offered has also considerably increased over the period.

S.No	REG.No	NAME	PLACED COMPANY	Designation
1	311014205018	MANIMEGALAI S	INFOSYS	System Engineer
2	311014205005	ASWATHY S	INFOSYS	System Engineer
3	311014205020	MARIA RASHMI FDO M	INFOSYS	System Engineer
4	311014205003	AMREEN S	IBM	Associate System Engineer
5	311014205033	SOWNDARYA S	ZOHO	Technical Support Engineer
6	311014205030	RESHMA U	1. ZOHO 2.GAVS Info Systems	Technical Support Engineer
7	311014205031	SAHLIN AHAMED M S	GAVS Info Systems	Trainee
8	311014205008	DEEPAK T	NEW GEN	Software Engineer
9	311014205010	DINESH B	NEW GEN	
10	311014205001	ABILASH C	QSPIDERS	Trainee
11	311014205012	EZHILRAJ R	1. QSPIDERS 2. IDBI FEDERAL	
12	311014205026	PRANAMYA G	QSPIDERS	
13	311014205034	SRIRAM M	QSPIDERS	
14	311014205011	DIVYAPRIYA V	1.QSPIDERS 2. ISSQUARED INDIA Pvt. Ltd.,	
15	311014205039	YAMINEE K	ISSQUARED INDIA Pvt. Ltd.,	Associate
16	311014205021	MUTHU RAMA KRISHNAN M	ISSQUARED INDIA Pvt. Ltd.,	Associate
17	311014205016	LYDIA P	ISSQUARED INDIA Pvt. Ltd.,	Associate
18	311014205022	NARENDRA ESWAR G	SUTHERLAND GLOBAL SERVICES	Consultant
19	311014205028	PRITIKHA P	SUTHERLAND GLOBAL SERVICES	
20	311014205014	KARTHIKEYAN J	TABSQUARE INFOTECH	Trainee
21	311014205009	DHINAKAR A S	TABSQUARE INFOTECH	
22	311014205002	ALAGAPPAN D	TABSQUARE INFOTECH	
23	311014205037	VIMALRAJ V	TABSQUARE INFOTECH	

TOTAL NO.OF STUDENTS	34
Total No. of Students Eligible	25
Total No. of Students Placed	23
PLACEMENT % (Total No. of Students)	**68%**
Total No. of Eligible Students Placed	19
PLACEMENT % (Total No. of Eligible Students)	76%

Out of 30 students of the batch, 24 students got placed in well reputed companies. The table below shows the specific details of the placement. Such a placement record reinforces the belief of reputed organizations in our students. The level of placement this year is in line with the previous five years record, if not more.

Placement Report 2018

It is our great pleasure to put forward Placement report of 2018 of Information Technology Department. It is not enough to tend a garden; the plants must be encouraged to bloom and emit fragrance. In the very same way, it is not enough to educate students to make them knowledgeable, it is necessary to ensure that they are put on the right path for becoming valuable citizens of the world. This is exactly what the department coordinators has the privilege of doing for the students. We consider it to be an honour and opportunity to present to you a group of young, dynamic individuals who have been groomed to face challenges that lie ahead for them in the industry and corporate world as a whole. A meticulous academic procedure has equipped students with the proficient and special skills to do extremely well in various demanding situations with ease and confidence. Interaction with the industry is done on a regular basis as many speakers from well known companies share their expertise with our students. Our teaching pedagogy which includes presentations, case studies, live projects, educational and industrial tours and participation in seminars and conferences, club activities, sports and cultural activities which help towards acquiring skills sought after and needed by Industries. Placement being the ultimate objective of education, we concentrate on it right from the first year itself. Aptitude Tests, Group Discussions, Personal Interviews and Personality Development Workshop give students exposure to various requirements of industries and train them in every aspect. The department ensures that each and every student of the department gets an opportunity to be selected for placement in some of the best companies of the nation. They are trained and groomed to face the ordeals arising out of selection exams and grilling

interviews. Care is taken to ensure that equal opportunity is given to all. It is our constant endeavour, to provide knowledge based technological services to satisfy the needs of the society and the industry and thus help in building our national potentiality in technology and research for the development of the country. We are in the quest of international standards of excellence in all our endeavours and we aim at creating a complete personality in our students, professionally, socially and morally. The residential campus helps us in achieving this goal by providing academic liberty to innovate and come out with novel ideas. We assure that the industries will be benefited from these young and lively minds. We have a sanguine hope that the students will be well received by the industry. We wish the students grand success in their endeavours' and feel confident that they will make significant contributions to the industry in the course of their work. As a result of effort taken by T&P team we have achieved more than 75% in the placement record.

Placed Students 2018 – KCG College of Technology

We hope that many more would add in the near future. Our department students have secured challenging and highly paid positions in top ranking companies/organizations. Their abilities are well attested by the excellent reports from the recruiting companies. The names of some of the eminent companies are Infosys, Tabsquare, Zoho, Servion, Gavs, Sutherland Amazon etc.. KCG College of Technology conducts Placement Day on 28th April 2018 for honouring the students who have got offers in the reputed companies.

Mr. Abilash.S – Information Technology Department Receives Offer Letter from Chief Guest on the eve of Placement Day Function held on 28th April 2018

E-cell

E-Cell Activities (2017-2018)

Date and Venue :02 Mar 2018 and 03 Mar 2018 KCG College of Technology

Resource Person: Mr. SubbianSeetharaman

Participants :

All Year Students

E-cell organized KCG Cloud10 Bazaar inside the campus on 02/3/2018 and 03/3/2018. Students are interested to register their names for putting the stall and sell their products in following categories.

1. Home Needs

2. Kitchen Needs

3. Children's Educational

4. Terracotta Pots, Lamps, Décor, Wall Hangings etc.

5. Eco-Friendly Paper, Handmade and Jute Items

6. Clothes Exclusive Kid's/Women's/Men's Wear – Casual , Formal,

7. Footwear Kid's/Women's/Men's Footwear – Leather, Jute, Rubber,

KCG Cloud10 Bazaar Stalls

Participation of IT Students in E-Cell Cloud'10 Bazaar,

Vettiyaduvilayadu Stall:

This stall was based on selling garments and indoor PlayStation. In garments students sold women's college wear and men's casual T-Shirts. The other part of the stall was indoor PlayStation which includes playstation2, playstation3, virtual videos and games.

Biryani Stall:

This stall was based on all food items and beverages.The main product students sold was biryani and falooda.The other day students sold vada,samosa,crushers and ice-creams.

Outcomes:

This E-cell event to give entrepreneurial experience to our students

E-Week (2017-2018)

Date and Venue :10 Feb 2018 and 16 Feb 2018 KCG College of Technology

Resource Person: Dr.R.Ganesan

Participants:

        Second and Third Students

Description:

E-cell organized e-week inside the campus and various workshops are conducted and students from third and second year participated and gain knowledge in various fields

Program	Date	Time & Venue
E week		10.02.2018 to16.02.2018
• Startup Carnival	10.02.2018	9.30 a.m to 3.30 p.m. at F14
• Way forward for Aspiring Women Entrepreneurs	11.02.2018	9.30 a.m. to 4.30 p.m. at TBI – HIET Campus
• At Schools – Educating Entrepreneurship	12.02.2018	9.30 a.m to 12.00 noon At schools
• Re-Create	13.02.2018	2.00 p.m. to 4.00 p.m. at Drawing Hall (Room No.3003)
• My Story – Student Startups of KCG& Intern Fair	14.02.2018	2.00 p.m. to 4.00 p.m. at F14
• Entrepreneurial opportunity in Travel & Tourism	15.02.2018	2.00 p.m. to 4.00 p.m. at F14
• Shark-tank	16.02.2018	2.00 p.m. to 4.00 p.m. at F14
Events Off Campus		
• Walkathon	09.02.2018	10.00 a.m to 12.00 noon from our college campus to Okkiampettai (Near CTS)
• Flash Mob	11.02.2018	7.00 a.m to 9.00 a.m at Besant Nagar Beach
• Rural Visit	13.02.2018	4.30 p.m. onwards to Kannagi Nagar

Agenda – E- Week Program

Third year IT students are participated recreate event and design the wind based car using recycling products. Second and Third year students are participated the walkathon event from college campus to Okkiampettai.

Outcomes:

This E-cell event to give entrepreneurial experience to our students

I-Cell Activities (2017-2018)

Date and Venue :23 Feb 2018 KCG College of Technology

Resource Person: Mr.Dorai Thodla

Participants :

     Third and Final Year Students

E-cell organized Innovation Project Challenge inside the campus on 23/2/2018. Students are interested to register their names and presenting their project. Two batches selected the final round and presenting the projects.

IOT Based Smart Glass:

Description:

This project is to create a Smart Reader for the Visually-challenged persons to read any sort of reading materials. It gives a clear vision on text of reading material which would be very useful for them. It collects the data from the world (Reading material) and stores it to the cloud then it is translated and converted as audio.

MTC Tracking:

Description:

This project is to provide an interface for the public who are waiting for their bus. Enabling a time management for a user and allowing him to choose the bus according to his comfort. It allows visitors from other town to reach their destination with our navigation system.

S.No	Student Name	Project Name
1	GauravVashista	MTC Tracking
1	Mukesh Kumar	MTC Tracking
2	Naveen K T	IOT based Smart glasses
2	Keshav M	IOT based Smart glasses

Outcomes:

Students are motivated to do innovative projects.

Report on Placement Awareness Program

Ms. R. N. Sharmila, Assistant Professor, Information Technology Department Organized the placement awareness program for final year students on 22/07/2017 at Watts Humphery Lab from 10.00 A.M. to 12:00 P.M.

Mr. Vignesh.S. Programmer Analyst, CTS, Chennai (Alumini – IT Department) emphasis on the importance of Placement inside college. His speech focused on the difference between product based company and service based company, Teams of company and its scope and the types of companies,Opportunities around the world,domain knowledge,how to increase confidence level and self motivation also discussed about on-campus and off-campus interviews,startups,prepare aptitude questions,technical and group discussions. The session was very interactive.

Placement awareness program

Higher Education Cell

Report of session on"*Sharing The Experience Of Doing Higher Studies In Canada*"

Under the banner of Higher Education cell and Alumni association of the department of Information Technology, an experience sharing session of "Doing higher studies in Canada" was conducted for the pre-final year students on 1st March, 2018. Mr. Mohan Vigneshwar, an alumnus of IT department shared his experience in Canada. He is doing MS in Cloud Computing for Big Data in Lambton College, Ontario, Toronto.

Mr. Mohan Vigneshwar took the session in greater detail : even including the VISA process and his experiences in the consulate. He also discussed on the "calling" he had for higher studies. It was really a motivating session.

Mr. Mohan Vigneshwar addressing the Students

Report on "Motivation Programme" by Mr. Kalaiarassan

A motivational talk was conducted for the pre-final year students by Mr.Kalaiarassan, Associate Consultant, Gaininsights Solutions, Bengaluru, Alumni of 2016 batch on 13-02-18. He gave a brief introduction about the industry needs from the freshers. Also he briefed about how to handle the stress in an interview.

Then he gave a glimpse of various stages of placement (aptitude, technical round, Group Discussion, HR Interview) attended by him and his experiences. He shared a good amount of his experience to give a clear view of the different kinds of situations that will be facing during the campus interview. The students interacted with the alumni and clarify their doubts regarding the interview and how to expose their knowledge while attending the interview.

Alumini Shares his experience with students

International and Foreign Affairs Cell

Report of Session on How To Apply for Higher Studies Abroad

The International Affairs cell and Alumni association of the department of Information Technology jointly conducted a session on "How to apply for higher studies abroad" for the pre-final year students on 27th February, 2018. Mr. Dritesh T, educational consultant in Baiju's classes and an alumnus of IT department handled the session.

He gave a brief idea on the procedures to be followed for applying for higher studies abroad starting from the resume preparation. He also emphasized on the need for doing higher studies in the present scenario. The session was very informative in toto.

Mr. Dritesh. T. – Alumini 2017 Pass out addressing the students

<u>Sports Activities</u>

It has been forgotten that academic learning and sports education complement each other. They resemble the two sides of the same coin. If sports education is carried out accompanied with the academic curriculum, the overall personality of the student is increased to quite an extent. The qualities of the leadership, sharing, team spirit and tolerance are learnt from sports. Sports education not only teaches the students to maintain the physical stamina, but also the habit of obedience, discipline, the determination to win, willpower, etc. The power of reasoning, mental development, vocational specialisation comes from the academic education of the students. Therefore, sports education along with the academics result in the all-round development of the students. The sports activities of the department of Information Technology is enlisted herewith:

1. Mr. S. Vijayaprakash and Mr. Arun Pandi of third year IT department won the national award of ISSHINRYU KARATE for karate.
2. Mr. Bezaleel Samraj was a member of the football team which won Anna University Interzonal National Sports.
3. Mr. Bezaleel Samraj was a member of the football team which won Hindustan Trophy National Sports.
4. Mr. Bezaleel Samraj was a member of the football team which won KCG Tophy National Sports.

Passing out batch (2014-2018)

Outstanding Alumni Achievement

The alumni have consistently brought laurels to the department. To mention a few:

1. Mr. T. Ranjith (2012 – 2016 batch): He and his team was mentioned in the Forbes International magazine for the stellar performance in the industry.

2. Mr. S. Balaji (2013 – 2017 Batch) : He received the certificate of appreciation from Infosys for his contributions towards refunds module of GST Phase project.

Prominent Alumni

1) Dr. MUTHU KUMAR

DESIGNATION: Executive Director

COMPANY: SSG Power Private Ltd.

BATCH: 2010

DESCRIPTION:

He is the Executive Director of SSG Power Private Ltd. He is responsible for over thousand solar power installations in an around South India.He was awarded the   "Viswajothi Award" as well as the "young entrepreneur Award" by India cements. He has also written a book on solar energy titled as "Aadhavaninaravanaipil". He has been featured in several newspapers. He also got the "entrepreneurship award" at KCG College of Technology

2) **Ms. HEMA MALINI**

DESIGNATION : System Analyst-Data Science

COMPANY : Verizon

BATCH : 2010

PREVIOUS EXPERIENCE: Worked as software engineer in iNautix from 2012 to 2016.

DESCRIPTION:

  She was awarded as best outgoing student in her batch. Her paper on Web Service won best paper awards in national conferences and has been selected for IEEE conference. She has won first place in codefest(Global level coding event across perching). She has secured 2nd rank in her university in her master's degree. She has given guest lectures in our college.

3) **Mr. DHIVAGAR**

DESIGNATION: Consultant-BI

COMPANY: Gain Insights Solutions Pvt Ltd

BATCH: 2013

DESCRIPTION:

He has participated in many activities that were held during his undergraduate degree programme.He has helped students with their career development.He has delivered guest lectures to IT students.He constantly motivates students to achieve greater heights in life.

4) Mr. ROHIT C.S

DESIGNATION: Co-founder/Director

COMPANY: Ideamaginative solutions Pvt Ltd.

BATCH: 2013

PREVIOUS EXPERIENCE: Webdefy Creative studio Pvt Ltd,Cloud 10,TEDx KCG

DESCRIPTION:

He had so much creativity in him from his college days itself.He has work experience in almost 4 companies till date.He is presently the proud director of Ideamaginativesolutions. He has recruited students from our college.

5) Mr.GRANDIN MAJOR

DESIGNATION: Performance Analyst

COMPANY: TATA Consultancy Services

BATCH: 2014

DESCRIPTION:

He is a great motivational speaker who is currently working in TATA consultancy services.He works in open source performance testing using tools like Jmeter and Gattling.He offers career guidance to many college students.His guest lectures are very inspirational.

6) **Mr.**DIBAKAR PAUL

DESIGNATION: IT Infrastructure Engineer

COMPANY: HCL Technologies

BATCH: 2014

DESCRIPTION:

He is a B.Tech graduate with adequate communication and technical skills and is currently focused on a stable career growth.At present he is actively working towards a change in his employment and anticipating to join an organization that provides an opportunity to work and enhance his knowledge and skills.He has attended the orientation in our college and has delivered many motivational talks.

7) **Mr.GOUTAM. K**

DESIGNATION: CHIEF EXECUTIVE OFFICER

COMPANY: Enchanter Corporation

BATCH:2014

DESCRIPTION:

He is responsible for all client side delivery to all national and international clients.Leading a small team of members involved in development of applications in different platforms such as android,phpand IOS.Generates and manages sales including P&L accountability.He has been serving clients over 7 countries and now trying to expand his global presence.He has recruited more than 10 students from our college.

8)Ms.SARANYA V

PLACED COMPANY:

1.UnitechTransfer,Germany,Salary(22-33 lakhs)

2.Happiestminds,Bangalore(3.5 lakhs)

BATCH: 2016

DESCRIPTION:

She has very good technical skills and programming skills. She actively engaged herself in workshops and internships that took place. Her communication skills are very good. She was the only student to be placed in Unitech Transfer, Germany.

9) Mr. V.P. Jagatheeshwaran

Deputy Collector, Kadalur

Government of Tamil Nadu.

Batch: 2007-2011

Department: Information Technology, KCG College of Technology.

Mr V.P. Jagatheeshwaran, an alumnus of KCG College of Technology (IT 2007-2011), secured 6th position in the Tamil Nadu Public Service Commission (TNPSC) Group 1 examinations for which results were announced on 12th August 2017. He is going to be posted as Deputy Collector in one of the districts in Tamil Nadu. And known for his dedication and hard work, he has already cleared the Indian Forest Service (IFS) with All India Rank 78 and Tamil Nadu rank no. 4.

As a resource person he conducted a session on how to prepare for civil services and interacted with the members of KCG Civil service Aspirants Club.

Feedbacks from Alumni

Abinay_2013.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home | Tools | Abinay_2013.pdf ×

1 / 2 | 88.3%

---------- Forwarded message ----------
From: "Abhinay Natarajan" <abhinay.natarajan@gmail.com>
Date: 31-Jan-2017 8:19 PM
Subject: IT 2009-2013
To: <hodit@kcgcollege.com>
Cc:

Dear Sir,

I am Abhinay Natarajan from 2009-2013 Batch. I am currently working for a logistics company based out of Mumbai. Though it is not in the field of IT, my experience of studying in KCG College of Technology helped me a lot in shining and getting promoted every year.

The College, especially the IT department staffs and the HOD had enriched me with knowledge of Information Technology as well as other aspects of my life which made me a man who i am today.

In spite of having a chunk of arrears, the motivation given by the staffs made me clear everything in one shot. I have personally seen the department growing to heights.

Few suggestions from my side.

- Please inculcate more of practical training which will help the students when they join any company.
- Conduct a symposium every year which enriches the leadership and activity building quality among students. This also gives them wide exposure.

Kudos to the staffs, HOD and the college for giving us wonderful education.

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---------- Forwarded message ----------
From: **esther monisha** <monishaesther@yahoo.com>
Date: Thu, Jan 26, 2017 at 9:21 PM
Subject: Feedback about Department for NBA Accreditation
To: "Frank Vijay.J." <hodit@kcgcollege.com>, Frank Vijay <hoditvijay@gmail.com>

Dear Sir,

The department of Information Technology has been an integral part of my college life. The support I got from every member in the department has been crucial to my growth throughout my undergrad education. I am grateful to the staff who went out of their way to put together resources

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04/02/2017   Kcg college of Tech Mail - Fwd: Feedback about Department for NBA Accreditation

to help us understand our lessons better. Their availability outside of regular class hours helped us clarify doubts and therefore learn much through discussion with our mentors. Headed by Dr. Frank Vijay, the IT department has been able to pull off many events including workshops, seminars and conferences. The department has gone long and far to ensure we got a wholesome experience in college with adequate exposure to technology being used in the industry. Toward the close of our time there, additional classes were held to prepare us for life after college. Especially during our final year, there was much work done in the background to facilitate placement drives and prepare us for the same. Every effort put in to aid our intellectual growth has helped my career thus far.

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From: "Jatin S Chhabriya" <jatinschhabriya@gmail.com>
Date: 02-Feb-2017 2:52 PM
Subject: What I learnt at KCG
To: <hodit@kcgcollege.com>
Cc:

I graduated from the Information Tech Department at KCG College of Technology in June 2013, I hold the four years I spent there in my fondest memories till date.

Some of my achievements:
1. Got awarded a sponsored delegation to the TEDxSummit in Doha, Qatar in 2012.
2. Was recognized as the 'Best Leader' at the Annual College Day celebrations 2013.
3. Served as the Vice President and Technical Coordinator of the Campus Entrepreneurship Cell from 2009-2013 and cofounded a Campus Company recognised by The Hindu and National Entrepreneurship Network, New Delhi, India.
4. Served as the Primary Licensee of TEDxKCG 2012 an event devoted to spreading ideas and nurturing change makers.
5. Got the opportunity to work on projects and participate in Symposiums with the Sponsorship of DST, Government of India.
6. Graduated in the Top 7% of the batch and got placed in Infosys Technologies Limited, Bangalore.

I hold the deepest gratitude towards the Department of Information Technology, and my HOD Dr. J. Frank Vijay who encouraged me to pursue my interests and acted as catalysts in striking the balance between Academic, and Co Curricular Life. The faculty honed me to become a better Leader and collaborate effectively in a competitive environment. Without their support and understanding, I would never have had such a nourishing college going experience. The Dept of Info Tech. provided us a stimulative environment and gave us ample opportunity to advance holistically in both our Technical fields and develop skills of Research, Entrepreneurship and Professional Ethics which have been instrumental in my success as a Working Professional.

I look forward to continued association with my almamater as an Alumni and contributing to the success of the Department in the years to come.

KCG ALUMINI MEET

The KCG Alumni Meet was arranged on 5th August 2017 at the college premises after 15th Graduation Day Celebrations. Around 30 Alumni students of Information Technology department were present rejoicing their meet and sharing their experience. Principal and Vice Principal addressed the gathering. A photo session was arranged at the end.

Students of Information Technology Department attending Alumni Meet

Group Photo by Alumni's with Principal and Coordinators

Future Plans

Almanac 2018 has indeed underscored both the volume and intensity of the activities our students and staff members have undertaken. These activities have undoubtedly increased the standard of technical expertise the IT family possesses. The report has fixed a benchmark in such a way that meticulous planning and careful execution is very much required in the coming years to keep the flag of IT department high. The industry interactions in terms of internships, collaborative programs, and developmental trainings are indeed acting as the stepping stone for the future batches to excel in the field of Information Technology. These programs inevitably opens up larger vistas of technical progress, placement opportunities, intensive and dedicated FDPs, presentation and publication avenue and knowledge sharing platforms. The department of Information Technology has thoroughly proved its metal over the years and is quite ready to establish a centre of excellence in its forte. The dedicated faculty members, hardworking and street-smart students guided by able and co-operative management is a real life force power of the IT department. These salient features are seldom observed in any other engineering institutes and this unique capability makes the department stand out from the crowd, the future is bright and the students can excel in toby exploiting these possibilities.

Intellectual Capital

KCG

COLLEGE OF TECHNOLOGY

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