CODER'S 🔗 CONNECT

DEPARTMENT OF CSE

KCG
COLLEGE OF TECHNOLOGY
AFFILIATED TO ANNA UNIVERSITY | AUTONOMOUS

nirf
Innovation Ranking 2023
Band 11-50

NBA
NATIONAL BOARD OF ACCREDITATION

ACCREDITED WITH GRADE
A+
NAAC

VISION

The department of Computer Science and Engineering desires to become a prominent centre of excellence for producing competent IT professionals for providing software and software enabled solutions.

MISSION

- Provide quality education in the field of computer science and engineering & related domains
- Facilitate socially responsive research and innovation
- Inculcate professional behaviour, a spirit of entrepreneurship and commitment to the progress of the nation
- Accommodate evolving software development tools and required implementation facilities

EDITORIAL'S DESK

- Welcome to the heart of innovation and education at KCG College of Technology, where our department serves as the engine driving intellectual growth and personal development. We are dedicated to sculpting well-rounded individuals who not only excel academically but also embrace the broader aspects of life.

- Our approach combines the best of academia with real-world experience, creating a dynamic environment where students can hone their skills and shape their character.

- We don't just produce graduates; we cultivate future leaders who will make a positive impact on the global stage.

CODER'S CONNECT TEAM

JYOTSNA T
II YEAR CSE

OVIIYAA C R
II YEAR CSE

JEEVA RITHIK J
II YEAR CSE

KCG TECH

TABLE OF CONTENTS

FACULTY RESEARCH PUBLICATIONS

Faculty research publications involve the dissemination of original research findings through various scholarly channels. Typically, faculty members publish their work in peer-reviewed academic journals, which ensures the quality and validity of the research. They may also contribute to edited volumes, book chapters, and conference proceedings. Publications not only advance their field but also enhance their professional reputation and contribute to the university's academic prestige. As Albert Einstein once said, "The important thing is not to stop questioning."

Dr. Jothi S

Dr.Jothi, S,"The self-adaptive dwarf mongoose optimized bidirectional network approach for enhanced recognition of overlapped English cursive characters", SIViP 17, 4465–4473 (2023). https://doi.org/10.1007/s11760-023-02680-2

Dr. Krishna B V

Dr.B.V Krishna "Optimizing E-waste management: Deep learning classifiers for effective planning", Volume 443,1 March 2024, https://doi.org/10.1016/j.jclepro.2024.141021

Dr. Vanitha R

- Dr. Vanitha R, "Advancing Fault Detection Efficiency in Wireless Power Transmission with Light GBM for Real-Time Detection Enhancement" , International Research Journal of Multidisciplinary Technovation (IRJMT), Vol. 6 No. 4 (2024): Volume 6, Issue 4, Year 2024,https://doi.org/10.54392/irjmt2445

- Dr.Vanitha, "Optimizing Electric Vehicle Charging Infrastructure through Hybrid Machine Learning Techniques for Smart Energy Management," SSRG International Journal of Electrical and Electronics Engineering, vol. 11, no. 7, pp. 148-158, 2024. https://doi.org/10.14445/23488379/IJEEE-V11I7P112

BOOK PUBLICATIONS

Agrawal, A. V., Sujatha, G., Sasireka, P., Ranjith, P., Cloudin, S., & Samp, B. (2024). Cloud Computing and Machine Learning in the Green Power Sector: Harnessing Sustainable Innovations:. In G. Revathy (Ed.), Advanced Applications in Osmotic Computing (pp. 151-179). IGI Global. https://doi.org/10.4018/979-8-3693- 1694-8.ch009

EVENTS

HUMAN ASPECTS OF CYBER SECURITY

On 13th February 2024, Dr. Panagiotis Andriotis from the University of Birmingham delivered a talk on "Human Aspects of Cyber Security." Students gained insights into social engineering, phishing awareness, and the behavioral psychology behind cyber scams. Dr. Andriotis emphasized insider threats and the importance of fostering a strong security culture. The session highlighted the significance of understanding human vulnerabilities and the role of user training in preventing cyber threats, bridging the gap between technology and human behavior in cybersecurity.

AI: IS THAT A BLACK MAGIC?

On 23rd February 2024, Dr. Sudarsun Santhiappan, Chief Scientific Officer of BUDDI AI, conducted a talk titled "AI: IS THAT A BLACK MAGIC?" Students gained insights into the inner workings of AI, including machine learning, algorithms, and data processing. Dr. Sudarsun clarified that AI is not magic but a sophisticated tool driven by data and human programming, showcasing its practical applications and limitations.

Prompt Engineering & GEN AI Tools

On 23rd and 24th February 2024, a two-day workshop on "Prompt Engineering & GEN AI Tools" was held, where students learned to craft effective prompts for optimizing AI-generated outputs. They explored various generative AI tools, experimented with prompt techniques, and gained hands-on experience in guiding AI models for accurate and creative responses. The workshop enhanced their skills in prompt design and the practical application of AI tools.

IGNITE MINDS TO APP DESIGN

On February 24, 2024, Mr. Alex John M, Solution Architect (UI/UX) at HCL Technologies , led the workshop "Ignite Minds to App Design." Students learned app development fundamentals, including UI design, UX principles, and prototyping. The hands-on workshop empowered them to create user-friendly apps and apply design thinking to solve real-world problems.

WORKSHOP ON AR/VR

On February 24, 2024, Ms. Swethasree from IITM guided students through AR/VR applications. The workshop empowered students with practical skills and creative problem-solving.

NEXT GEN CRM

On March 7, 2024, Mr. Aldous Huxley, Team Lead at LTI Mindtree, conducted a seminar on "Next Gen CRM: Microsoft Dynamics." Students explored advanced CRM strategies and future trends, empowering them with practical knowledge in customer relationship management.
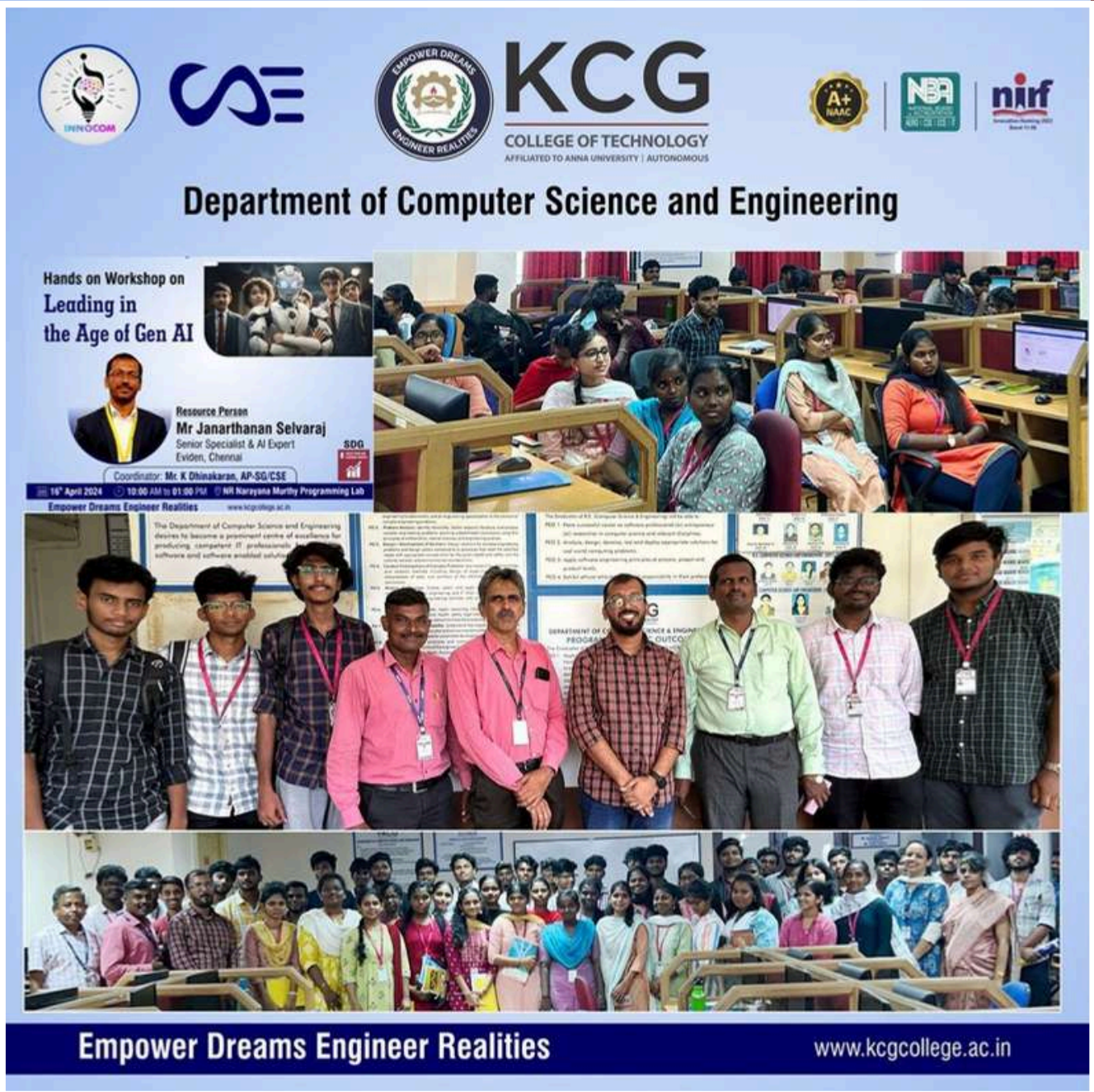
OPEN DATABASE –MONGO DB

On March 28, 2024, Mr. K. Selvakumar from Infosys led a seminar on "Open Database – MONGO DB," where students explored MongoDB's core features and applications. Both seminars equipped students with practical knowledge and insights into cutting-edge technologies.

TEST AUTOMATION AND TOOLS

On 15th April 2024, Mr. S. Suresh, Associate Consultant at Oracle Financial Services Software, conducted a seminar on "Test Automation and Tools." Students gained insights into various automation testing techniques, the importance of test automation in software development, and an overview of popular testing tools. This session provided practical knowledge that will help attendees in their future careers in software engineering.

LEADING IN THE AGE OF GEN AI

On 16th April 2024, Mr. Janarthanan Selvaraj, Senior Specialist and AI Expert at Eviden, led a workshop titled "Leading in the Age of Gen AI." Students explored the impact of generative AI on leadership and management practices, learned strategies for leveraging AI in decision-making, and discussed the future of work in an AI-driven world. This workshop equipped participants with essential skills for thriving in a rapidly evolving technological landscape.

STUDENT ACHEIVEMENTS

- On March 9th, 2024, Ramanan SV, a third-year student, won First Prize at the Chennai District level Folk Dance Competition organized by the Art and Culture Department of Tamil Nadu. This achievement showcases Ramanan's talent and dedication to the arts.

- On February 26th and 27th, 2024, fourth-year students Shyamily R and Nitisri T S were honored with the Best Project Award at the Shristi Competition, hosted at Saintgits College of Engineering in Kerala.
- On February 23rd and 24th, 2024, fourth-year students Nitisri T S and Shyamily R secured the Second Prize at the VISAIVel Tech Competition.

- Amirah Aanjum MN, Jessica R, and Ajay, all third-year students, earned the Fourth Prize at the prestigious IIT PALS Cyber Edge competition, held at IIT Madras on 5th and 6th March 2024.

- Victor Jebaraj (II Year) secured the prestigious Gold Medal at the All India Level Boxing Championship, held at Nehru Stadium from May 17th to 19th, 2024

- Mohanapriya M (III Year) and Nirmala Devi M (III Year) secured the Second Prize in the SAE ISS Bicycle Design Challenge, held at the Knowledge Institute of Technology, Salem , on February 24th and 25th, 2024.

- Shibin M J, a third-year student, exhibited exceptional performance at various NCC CADO Fests in 2024, earning 1st, 2nd, and 3rd prizes across diverse events such as Contingent Drill, Guard of Honour, NIAP, Kholna Jodna, Fast Dressing, Jeeva Sparsam, and Tent Pitching. These achievements were secured at prestigious institutions including DG Vaishnav College, Guru Nanak College, Sir Theagaraya College, and Dr. Ambedkar Government Arts College between February and March.

- Karthick G, a fourth-year student, excelled in multiple NCC competitions in 2024. He won the prestigious Cherry Blossom Award at the 1st Veera Madarasi Competition held at The Tamil Nadu Dr. Ambedkar Law University on January 6th. Additionally, he secured 2nd and 3rd prizes in the Guard of Honour and Contingent Drill events at NCC CADO Fests hosted by DG Vaishnav College, Guru Nanak College, and Sir Theagaraya College.

- Samira S, a third-year student, secured First Prize at the CMR Hackfest, held at CMR College of Engineering and Technology on 1st and 2nd March 2024. In addition to this achievement, she has been awarded a fund of Rs. 75,000 through Startify to support her startup, reflecting her entrepreneurial spirit and innovative approach in the field of technology.

- Kalyanasundaram K, a third-year student, won the Second Prize at the IET GEN AI Ideathon, held at Hotel Zone, Chennai, on 23rd March 2024. Additionally, he has published two books, titled "DATA RELEAM" and "IGNITE AI: Unleash the Future," both available on Amazon Kindle, showcasing his expertise and contributions to the field of artificial intelligence.

VIRTUAL REALITY [VR]

TECHNICAL ARTICLE
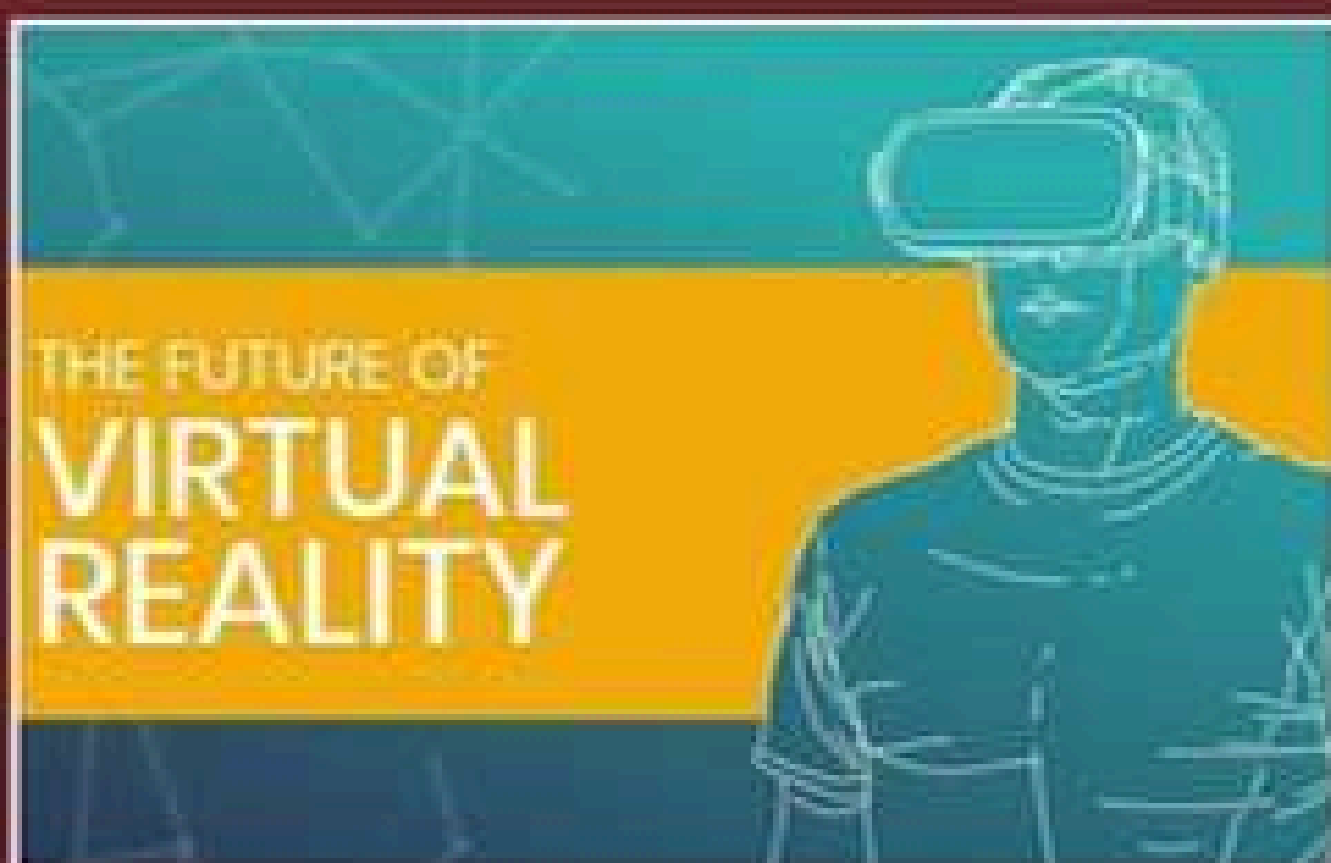

**Ms.HARINI B
[SECOND YEAR]**

INTRODUCTION:

Virtual reality (VR) has swiftly grown from a niche tech into a transformative tool for digital interaction. Once mainly for gaming and simulations, VR now spans fields like healthcare and education, creating immersive experiences that connect virtual and real-world environments.

EVOLUTION OF VR TECHNOLOGY:

VR started in the 1960s and gained momentum with the release of Oculus Rift in 2012. Companies like HTC and Sony advanced VR devices, while platforms like Unity and Unreal Engine enabled realistic virtual environments. Today, VR enhances applications in virtual tourism, training, and mental health therapy.

FUTURE OF VR TECHNOLOGY:

VR's future promises transformative impacts across industries. In healthcare, it will support therapies and surgical simulations, while in education, VR will enable immersive global learning. Integration with AI, AR, and 5G will boost VR's realism, driving innovation in training, remote collaboration, and digital engagement.

CONCLUSION:

VR's evolution from experimental simulations to a mainstream technology showcases its versatility across sectors. With advancements in AI, AR integration, and realism, VR continues to shape a future rich in immersive experiences, offering new possibilities in healthcare, education, and professional fields, and paving the way for a more connected, interactive world.