



KCG
COLLEGE OF TECHNOLOGY
AFFILIATED TO ANNA UNIVERSITY | AUTONOMOUS



CODER'S CONNECT



**DEPARTMENT
OF CSE**



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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



BHAVANA K
III YEAR CSE



DHARANI S
III YEAR CSE



ASWINSUNDHAR AS
III YEAR CSE 3

FACULTY RESEARCH PUBLICATIONS

Research is a continuous quest for knowledge that fuels innovation, deepens understanding, and drives societal progress. Faculty research, in particular, plays a vital role in contributing original insights to academic and professional communities through journals, conferences, and scholarly publications. It not only strengthens the foundation of their respective fields but also uplifts the academic standing of the institution. As Marie Curie once said, **“Be less curious about people and more curious about ideas.”** This spirit of curiosity and exploration lies at the heart of every research endeavor, inspiring both scholars and students to think critically and push boundaries. Through their research contributions, faculty members also foster a culture of inquiry and excellence, shaping the next generation of innovators. Their dedication ensures that knowledge continues to evolve, creating lasting impact across disciplines.

Dr. Cloudin S



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Dr. Krishna B V

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Dr. Swati Saxena



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Dr. Lakshmi N

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Dr. Vanitha R



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Dr. M. Robinson Joel



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Robinson Joel, M., (2025), "Making Clinical Decisions to Treat Patients by Using Health Information Technology", In B. Soufiene & C. Chakraborty (Eds.), Responsible AI for Digital Health and Medical Analytics (pp. 87-112). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-6294-5.ch004>

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Dr.S. Safia Naveed



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Ms. Keerthana G



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Ms. Saranya V

S. R, Saranya,, "Efficient Route Prediction Using ML Algorithm," 2024 International Conference on Computing and Data Science (ICCDs), Chennai, India, 2024, pp. 1-6, June 2024
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R.Saranya,"CNN-LSTM Framework For Accurate Fire Detection" ICSTSDG(2024 International Conference On Smart Technologies For Sustainable Development Goals) on Nov 2024, SA Engineering College

Ms. M.B.Anushlin

Leena



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EVENTS



AWS Cloud Solutions Architect-Associate

"From 29th July to 3rd August 2024, students attended a certification program on **"AWS Cloud Solutions Architect – Associate"** in collaboration with ICT Academy. Led by **Mr. Venkatesh, Head of Training**, the sessions offered industry insights and hands-on experience.

The program covered key AWS services and best practices, equipping students with cloud skills aligned to industry needs.

FDP on "Immersive Innovation of Digital Experience Using AR/VR"

In July 2024, a Faculty Development Program on **"Immersive Innovation of Digital Experience Using AR/VR"** was held, covering core concepts, tools, and real-time applications. It equipped faculty with practical skills to enhance interactive teaching and drive academic innovation.



Launch of Innothon 2024 & Seminar on Innovation in Cutting-Edge Technologies

On 3rd August 2024, **Innothon 2024** was launched alongside a seminar on Innovation in Cutting-Edge Technologies. Chief Guest **Mr. Kumar Sachidanandam**, Co-Founder of Ydealogy, highlighted the impact of AI, IoT, and blockchain across industries.

Mr. Sachidanandam emphasized innovation's role in industry transformation, encouraging participants to apply emerging technologies creatively. The launch set the stage for Innothon 2024 challenges.



Web Security and Bug Bounties

On 3rd August 2024, a workshop on “**Web Security and Bug Bounties**” was conducted by **Mr. Renganathan, Ethical Hacker & Founder of R Protocols**. The session covered essential web security concepts, common vulnerabilities, and the importance of **ethical hacking** in safeguarding digital systems. Mr. Renganathan introduced bug bounty programs, explaining how ethical hackers help organizations identify and fix security flaws. He also shared real-world examples to highlight the growing demand for cybersecurity experts. The workshop encouraged students to explore careers in ethical hacking and actively contribute to creating a safer digital world.



AIML & Web Development

On 16th and 17th August 2024, an Industry-Focused Value Addition Program on “**AIML & Web Development**” was conducted, featuring **Mr. Dinesh Kumar M, Founder & CEO, and Mr. Madhavan A, CTO of READ Automation**. The program aimed to bridge the gap between academic knowledge and industry needs. Sessions covered core concepts of **Artificial Intelligence, Machine Learning, and the latest web development trends**. Participants gained valuable exposure to real-world applications, enhancing their technical skills and industry readiness.



Big Picture on Building Enterprise Applications



On 31st August 2024, a seminar on **“Big Picture on Building Enterprise Applications”** was conducted by **Mr. Akshay R, Lead BI Engineer at Lumel Technologies Inc., Texas**. He provided valuable insights into building scalable, efficient enterprise applications, addressing key challenges, best practices, and real-world strategies. The session gave participants a clear understanding of **enterprise-level development** from both business and technical perspectives.

An Insight into Cyber Security in Industry

On 13th September 2024, a guest lecture on **“An Insight into Cyber Security in Industry”** was delivered by **Ms. Varsha Sundar M, Technical Lead at TCS**. She shared insights on the **rising importance of cybersecurity**, current cyber threats, and the role of professionals in protecting digital systems. The session emphasized proactive measures and real-time threat detection in safeguarding sensitive data.



Recent Trends in Network Security

On 13th September 2024, **Mr. Ragavendra Rao G.N, Associate Dean at ICFAI**, conducted a guest lecture on **“Recent Trends in Network Security”**. He discussed the latest advancements and emerging threats in network security, covering topics like **encryption, intrusion detection, and security protocols**. The session emphasized the need for adopting new technologies and strategies to protect sensitive data and the evolving role of network security professionals in combating cyber threats.



STUDENT ACHIEVEMENTS



- Mr. Iyadd Luqman K, Second Year and Ms. Rithika S K, Second Year won Third Prize in Smart City Challenge 8.0, A National level competition organized by Nokia and IET on 26 th September 2024.
- Mr. Iyadd Luqman K, Second Year and Ms. Rithika S K, achieved runner-up at the Instant Impact Ideathon organized by IET at Jeppiaar Engineering College.

- Ms. Balaabirami B, Ms. Haarini C V, Ms. D Devi Priya, and Mr. Faheem Rahman, Second Year CSE, won Third Place in Project Expo, a competition organized by KCG College of Technology in October 2024.



- Ms. Balaabirami B, Ms. Haarini CV and Ms. Hafsa Niaz – Second year CSE won the Special Mention Award in NATIONAL LEVEL IMPAIRATHON , Karpagam Higher Academy,October 2024

- Ms. Prithiyanga received the Admiring Leadership Award presented by IET in September 2024.





- Mr. Johnsmith G S, Second Year CSE, won Fourth Place in the Founder Chancellor's Trophy Football Match conducted by Hindustan Institute of Technology and Science on 3rd October 2024.

- Ms. Nihaarika Bhavan, Ms. Nulin Jeriba J, Ms. Pasala Sathvika, and Ms. Mythili S, Third Year CSE, won First Place under the Nari Shakti (18–25 years) category for their project 'Sparsha – A Systematic Entity to Address Grievances of Disaster' at the India AI Impact Festival 2024, held in New Delhi on 14th November 2024.



- Ms. Janani V and Ms. Sushmitha S, Third Year CSE, won the prestigious Dr. G.V.V. Rao Young Engineer Dreamer Award with a cash prize of ₹50,000 at SmartIDEathon 2024, held at GITAM University, Bangalore, on 13th November 2024. The event was organized in collaboration with Startup India, Invest India, Northeastern University Center for Emerging Markets (Boston), and the Northeastern University Center for Entrepreneurship Education (NUCEE).

TECHNICAL ARTICLE

The Emergence of Quantum Computing: A New Era in Computing Power



ASWINSUNDHAR AS
[THIRD YEAR]

Introduction:

We stand at the threshold of a revolution in computing. While conventional computers operate on classical bits (0s and 1s), quantum computing leverages quantum mechanics to solve problems traditional machines cannot. Following significant advances in recent years, quantum computing is fast becoming reality.

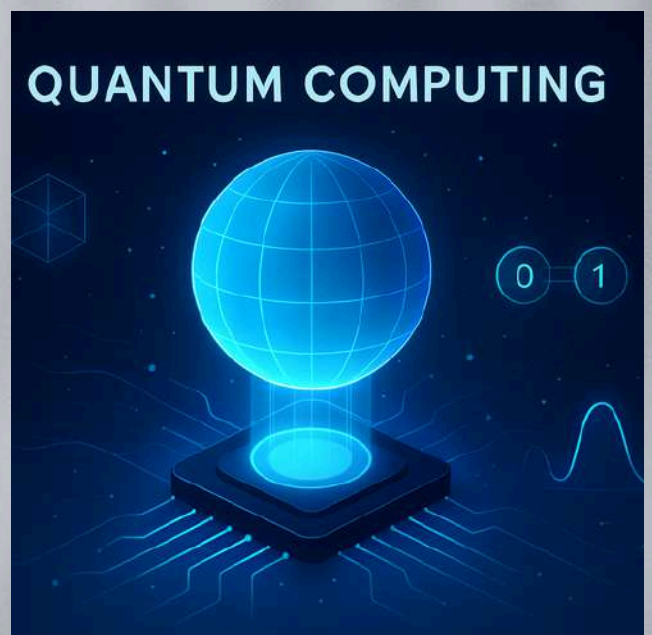
What is Quantum computing?

Quantum computing applies quantum mechanics principles through three key phenomena:

1. Superposition: Unlike classical bits, qubits can be both 0 and 1 simultaneously, enabling parallel calculations.

2. Entanglement: Linked qubits instantly influence each other regardless of distance, accelerating complex processes.

3. Quantum Interface: Quantum states mix to enhance correct answers and diminish incorrect ones, improving speed and accuracy.



Key Application:



Cryptography: Quantum computers can crack existing encryption systems, but also enable quantum-resistant encryption methods.

Artificial Intelligence: Quantum-enhanced machine learning could accelerate data processing for applications like language processing and image recognition.

Current Challenges :

Hardware: Quantum computers require extreme environments and are difficult to scale.

Software: Quantum algorithms and programming languages remain in early development.

Accessibility: High costs limit access, though cloud platforms are improving availability.



The Future :

While large-scale, fault-tolerant quantum computers remain distant, progress in hardware and algorithms is promising. Near-term applications will likely emerge in cryptography, finance, and pharmaceuticals.

Conclusion:

Quantum computing is set to become one of the 21st century's most transformative technologies, profoundly impacting science, business, and innovation as technical challenges are overcome.