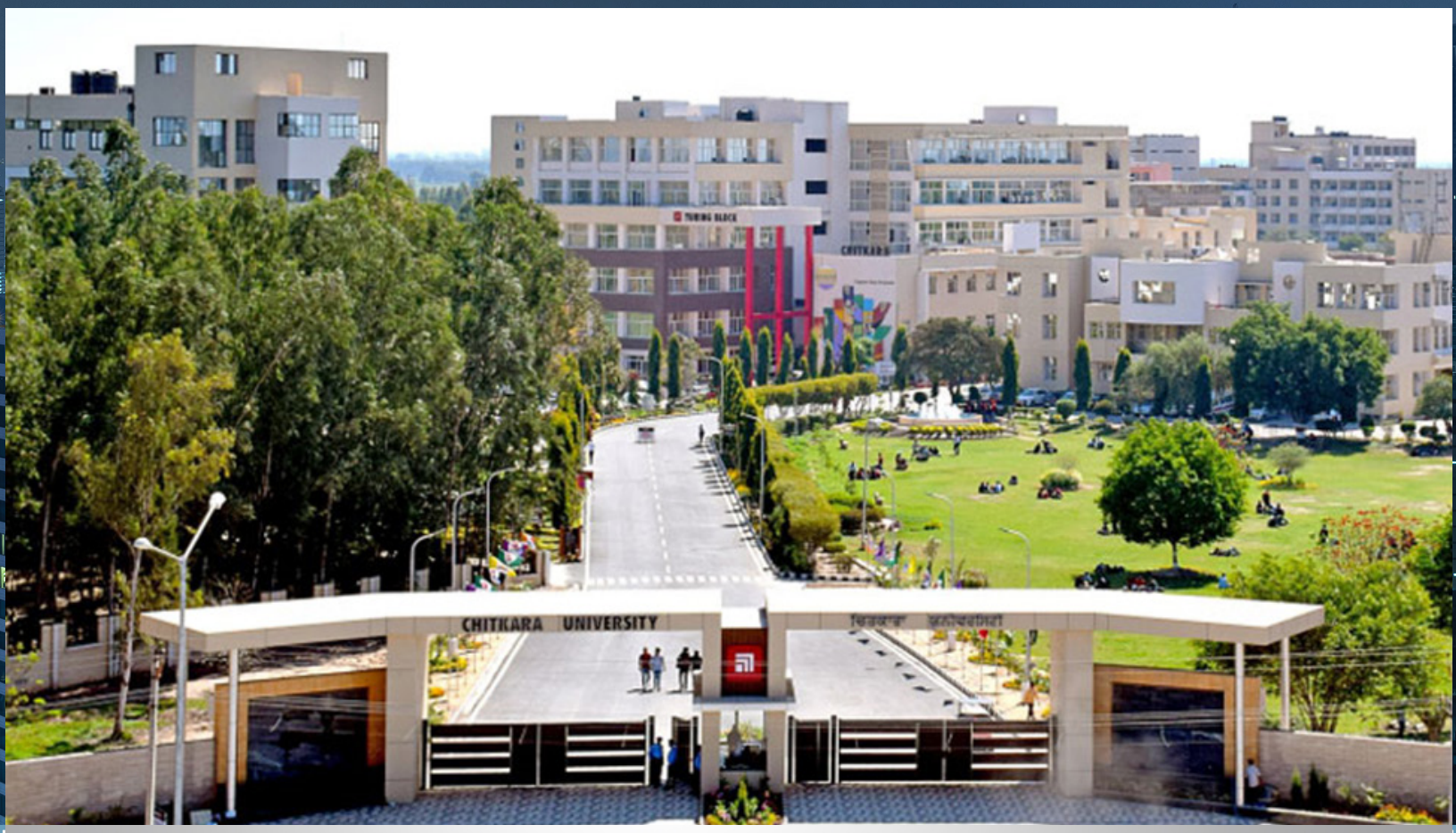
CHITKARA UNIVERSITY

NOUVELLE LIBERATION

Volume 11, Issue 2



Department of Computer Applications
Chitkara University Institute of Engineering and Technology
Chitkara University,Punjab

Table of Contents

EDITORIAL TEAM
Dr. Ruchi Mittal
Ms. Taruna Sharma
Dr. Divya Khanna

WEBSITE
https://www.chitkara.edu.in
EMAIL
ca@chitkara.edu.in

COMPETITION ON INNOVATIVE IoT PROJECTS AND PITCHING

March 20, 2025

The CSI Student Chapter, under the aegis of the Department of Computer Applications at Chitkara University, Punjab, successfully organized the Competition on Innovative IoT Projects and Pitching on 20th and 21st March 2025, held at Martin Luther Hall and Pierre Hall, respectively. The event brought together creative minds and tech enthusiasts to showcase their IoT-based solutions aimed at solving real-world challenges. This two-day offline competition provided a dynamic platform for students to present their IoT prototypes and pitch innovative ideas before a panel of experts.

Participants demonstrated not only technical excellence but also their understanding of practical implementation and entrepreneurial insight. The event highlighted projects ranging from smart city solutions to healthcare innovations, each reflecting the potential of IoT in transforming everyday life. The competition was structured to evaluate both the technical feasibility and impact potential of the proposed solutions. Teams were judged on innovation, design, scalability, and the clarity of their presentations. The pitching sessions were particularly impactful, encouraging participants to articulate their vision, justify their solutions, and respond to critical feedback from judges. By merging technology with creative thinking, the event fostered a spirit of innovation and collaboration among budding technologists. It concluded with acknowledgment and awards for standout projects, leaving participants empowered and motivated to pursue further exploration in the IoT domain.

EXPOSURE VISIT TO NOVEM CONTROLS

April 01, 2025

On 1st April 2025, the CSI Student Chapter of the Department of Computer Applications, Chitkara University, Punjab, organized an industrial exposure visit to Novem Controls, located in Phase 8B, Industrial Area, Sector 74, Mohali, Punjab.

The visit offered students valuable exposure to the real-world applications of these technologies in modern industrial environments.

The visit began at 9:30 AM and provided students with practical insights into real-time industrial workflows and advanced control systems. Company professionals demonstrated automation technologies, system integration, and quality control processes. A key highlight of the visit was the introduction to emerging technologies such as the Internet of Things (IoT), Machine Learning (ML), and Deep Learning (DL). Experts explained how IoT enables real-time monitoring and smart operations, while ML and DL are used for predictive maintenance, process optimization, and intelligent automation, including tasks like visual inspection and pattern recognition.

WORKSHOP ON INNOVATIVE JOURNEY OF MATHEMATICS IN INDIA:FROM VEDIC PERIOD TO MODERN TIMES

April 3, 2025

The CSI Student Chapter under the Department of Computer Applications, Chitkara University, Punjab, organized a two-day workshop titled "Innovative Journey of Mathematics in India: From Vedic Period to Modern Times" on 3rd and 4th April 2025 at Faraday Hall, Chitkara University, Punjab.

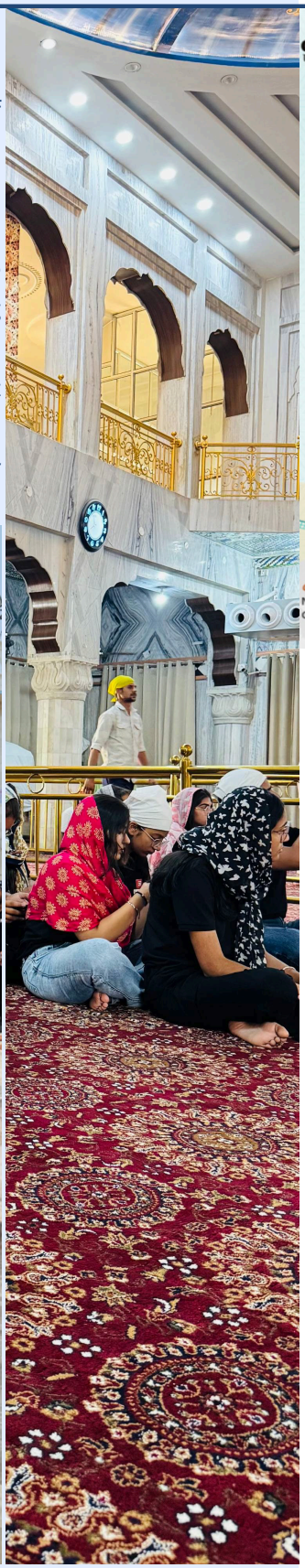
The workshop was conducted by Dr. Tania Bose, Professor, Department of Applied Science, Chitkara University, Punjab, who delivered an engaging session on the evolution of mathematics in India. She traced the journey from ancient Vedic contributions to modern mathematical developments, highlighting the work of renowned Indian mathematicians and their global influence.

The event provided participants with a deeper appreciation of India's rich mathematical legacy and its ongoing impact on science and technology.

WORLD HERITAGE DAY-A VISIT TO NADA SAHIB

April 18, 2025

On the occasion of World Heritage Day, observed on 18th April 2025, the Matrix Club under the aegis of the Department of Computer Applications, Chitkara University, Punjab, organized a meaningful and educational visit to Gurudwara 10th PaatShahi Sri Nada Sahib, Panchkula. The visit was aimed at celebrating and honoring India's rich cultural and spiritual legacy, fostering awareness among students about the importance of preserving our heritage, and providing them with a platform for experiential learning beyond the classroom.



The event witnessed enthusiastic participation from more than 50 students and faculty members. Upon arrival, the group received a warm welcome from the Gurudwara authorities and was taken on a guided tour of the premises. The historical significance of the Gurudwara—known for being graced by Guru Gobind Singh Ji after the Battle of Bhangani—was highlighted during the tour. Students were deeply moved by the stories of courage, sacrifice, and devotion associated with the site.

This was followed by active participation in Langar (community kitchen), where students helped serve and share food, embracing the values of togetherness and service to humanity. This initiative not only deepened the students' understanding of India's cultural richness but also instilled a strong sense of respect and responsibility toward heritage preservation. It encouraged them to reflect on their role in sustaining the traditions, monuments, and values that define our identity.

EXPERT TALK ON CRITICAL THINKING ON ISQTB FOUNDATION LEVEL-CHAPTER SERIES(CHAPTER-6)

April 30, 2025

An expert talk on "Critical thinking in ISTQB Foundation level chapter series (chapter-6)" was organized by the Software Testing Club under the direction of the Department of Computer Applications. Ms. Smitha Menon, Senior Consultant, and Dr. Deepika Chaudhary, Professor, Chitkara University, Punjab were the resource person in this session. Ms. Samitha mentioned the various testing metrices, quadrants and illustrates how to manage risk in software testing. She also discussed various testing tools and importance of automation in software testing. Dr. Deepika discussed the practical aspects of testing control, monitoring and risk management.

The session was arranged by Software Testing Club, Department of Computer Applications, Chitkara University, Punjab where students practiced various testing metrics and applying these metrics on the software. Students critically learned and analyzed risk management and testing controls.

2nd INTERNATIONAL CONFERENCE ON ADVANCED NETWORK TECHNOLOGIES AND COMPUTATIONAL INTELLIGENCE(ICANTCI-2025)

May 2, 2025

The 2nd International Conference on Advanced Network Technologies and Computational Intelligence (ICANTCI-2025) was held on May 2–3, 2025, at Chitkara University, Patiala, India. Organized in a hybrid format, the conference provided a platform for researchers from academia and industry to share high-quality research on advanced networking and computational intelligence. The event facilitated discussions on the challenges and future of technological advancements in these fields, fostering collaboration between academia and industry.

The conference was organized by Chitkara University, Punjab, in collaboration with City University, Malaysia, and the University of Wollongong in Dubai, UAE. The steering committee included:

Chief Patrons: Dr. Ashok K Chitkara (Chancellor, Chitkara University) and Dr. Madhu Chitkara (Pro Chancellor, Chitkara University)

Patron: Dr. Sandhir Sharma (Vice Chancellor, Chitkara University)

Conference Organizers: Dr. Jaiteg Singh (Pro-Vice Chancellor, Department of Computer Applications, Chitkara University, Punjab) and Dr. May El Barachi (Director, Faculty of Engineering and Information Sciences, University of Wollongong in Dubai)

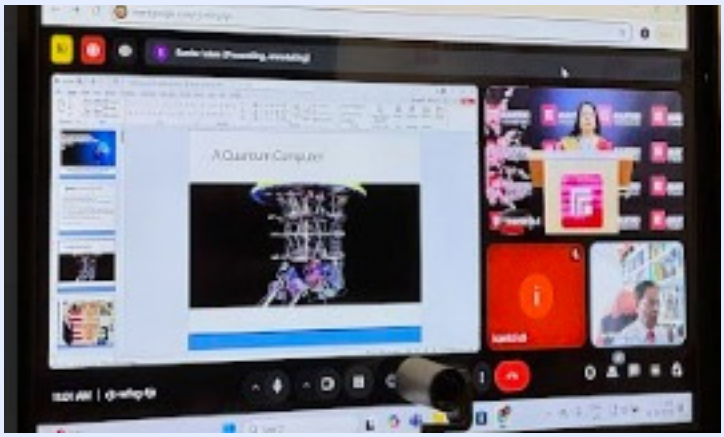
Conference Conveners: Dr. S B Goyal (Director, Faculty of Information Technology, City University, Malaysia), Dr. Ruchi Mittal (Professor, Department of Computer Applications, Chitkara University, Punjab), and Dr. Varun Malik (Associate Professor, Chitkara University, Punjab)

2nd INTERNATIONAL CONFERENCE ON ADVANCED NETWORK TECHNOLOGIES AND COMPUTATIONAL INTELLIGENCE(ICANTCI-2025)

May 2, 2025

ICANTCI-2025 aimed to address the opportunities and challenges presented by the advent of universal connectivity, sensing, and computation. The conference focused on the development of hyperscale, virtualized, open-source, hybrid, and multi-cloud networks, which depend on a complex array of advanced technological innovations. It served as a platform for presenting and sharing high-quality research in cutting-edge trends and technologies in the areas of advanced networking and computational intelligence. The conference brought together researchers from academia and industry to develop a comprehensive understanding of the challenges and future of technological advancements in networking and computational intelligence from different viewpoints .

The conference featured keynote speeches by Professor Sardar M. N. Islam from Australia on Quantum Computing, Technologies, AI, and Programming: Computer Aided Engineering and CFD Applications; and Dr. Sukhjit Singh Sehra from Canada on Steering Through Complexity: AI's Role and Challenges in Intelligent Transportation Systems. It provided an opportunity for participants to engage in discussions, share ideas, and present their research findings. The hybrid format allowed for broader participation, enabling attendees from different parts of the world to join the conference virtually.



ICANTCI-2025 successfully provided a platform for researchers and industry professionals to exchange knowledge and ideas on advanced networking and computational intelligence. The conference fostered collaboration between academia and industry, contributing to the advancement of these fields. The insights and discussions from the conference are expected to influence future research and development in advanced network technologies and computational intelligence.

COMPETITION ON DRIVING INNOVATION FROM INCEPTION TO PROJECTION

May 6, 2025

The CSI Student Chapter under the Department of Computer Applications, Chitkara University, Punjab, organized a two-day competition titled "Driving Innovation from Inception to Projection" on 6th and 7th May 2025 at Carnegie Hall, Chitkara University, Punjab.

The competition aimed to encourage creative thinking, innovation, and project-based learning among students by challenging them to convert original ideas into practical and impactful solutions. Participants presented innovative concepts spanning diverse domains such as technology, sustainability, healthcare, and education. Each team was evaluated based on originality, feasibility, societal impact, and presentation.

The event provided an excellent platform for students to showcase their entrepreneurial mindset, collaborative skills, and technical creativity. It reflected the university's ongoing commitment to fostering innovation and bridging the gap between ideation and implementation.

FACULTY ACHIEVEMENTS

Excellence Awards

STUDENT ACHIEVEMENTS

1st Position

Grishma Mishra

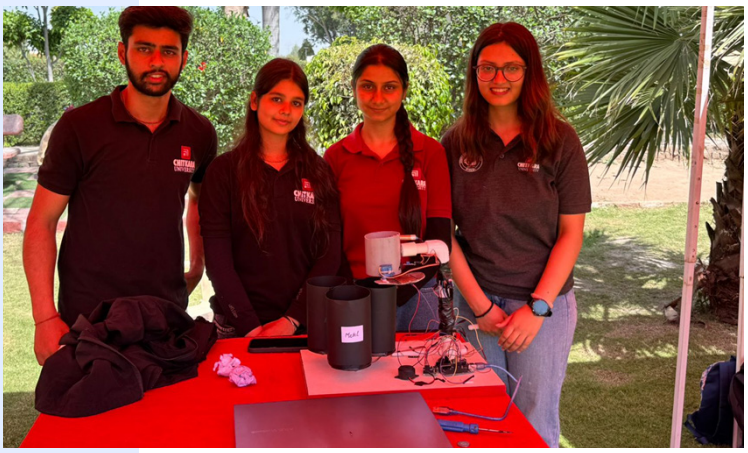
Diksha Verma

Chirag

Ishika

Project Title : Smart Dustbin

About : A smart dustbin system using Arduino can automate waste management by monitoring the fill levels of three separate bins—dry, wet, and recyclable. Ultrasonic sensors detect the waste level in each bin and send data to the Arduino. When any bin is full, an alert (via buzzer or display) notifies the user for timely disposal. LEDs can indicate the status (empty, half, full) of each bin for easy identification. This system promotes efficient waste segregation and encourages cleaner surroundings.



IInd Position :

Shaurya Kajla

Vanshika Malhotra

Vinayak Kaushal

Vishal Thapa

Project title: Smart Parking system with IoT

About: A Smart Parking System using IoT and a website allows real-time monitoring and management of parking spaces. Ultrasonic or IR sensors detect vehicle presence in each slot and send data to an IoT platform via Wi-Fi (e.g., using NodeMCU or ESP32). The available and occupied slots are displayed on a user-friendly website. Users can check slot availability remotely and reserve a space if needed. This system reduces time spent searching for parking and improves traffic management in urban areas.

STUDENT ACHIEVEMENTS

3rd Position

Sokin

Raghav Gupta

Project title: Gesture control automatic car

About: A gesture-controlled automatic car uses hand movements to control its motion without physical contact. An accelerometer sensor (like MPU6050) detects hand gestures and sends signals to an Arduino or NodeMCU. These signals are interpreted to move the car forward, backward, left, or right. Wireless modules like RF or Bluetooth transmit commands from the hand controller to the car. This system is useful for touchless control, robotics learning, and assistive mobility solutions.

Editorial Section

We present the current issue of our newsletter and we hope to get due feedback from our readers which can help us in improving our next issues.

“Happy Reading”
CHITKARA UNIVERSITY, PUNJAB

Chandigarh-Patiala National Highway (NH-64), Punjab-140401
Phone No: +91 1762 507084/86
Website: www.chitkara.edu.in