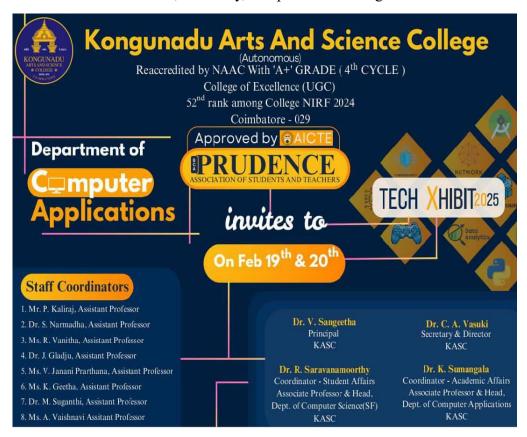


KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS) Re-accredited by NAAC with A⁺ Grade - 4th cycle, College of Excellence - UGC Coimbatore - 641 029.

Department of Computer Applications Exhibition Report – 2025

The exhibition aimed to showcase innovative projects, software applications, and research works developed by BCA students. This event provided a platform for students to demonstrate their technical skills, creativity, and problem-solving abilities.



CLASS A - IOT Based Models – 10 Models

CLASS B – Cyber Security Based Projects – 11 Chart works

CLASS C - Gaming Zone – 9 Games

CLASS D - Cyber Security and Networks Projects - 6 Projects

The above-mentioned models, chart works, games, and projects are given below.

CLASS A

1. IOT based Portable Soil Nutrient Analyser.

Students displays their innovative, low-cost and user-friendly device that analyses soil nutrient level in real-time. It providing farmers and agricultural professionals with accurate and actionable insights to optimize crop yields. It reduces waste and promote sustainable agriculture practices.



2.Math lab Tool

A Math Lab Tool is software or a set of computational tools designed to assist in mathematical analysis, problem-solving, visualization, and numerical computing. It is commonly used in educational institutions and research settings to facilitate learning and experimentation with mathematical concepts.



3. IOT Devices and Sensors.

Revolution your world with our cutting-edge IOT device and sensor. Seamlessly connect to the cloud, track real-time data and receive alerts on temperature, etc.,



4. Altra sonic glass.

Ultrasonic Glasses for the Visually Impaired: These wearable devices assist visually impaired individuals by detecting obstacles using ultrasonic sensors. The sensors emit high-frequency sound waves that reflect of objects, allowing the system to alert the user through vibrations or audible feedback. This technology enhances mobility and independence for users.

5.AI Based Smart Walking Sticks.

An AI-Based Smart Walking Stick is an assistive device designed to aid visually impaired, elderly, or physically challenged individuals. It integrates Artificial Intelligence (AI), sensors, and IoT technologies to provide enhanced mobility, obstacle detection, and navigation assistance.

6. Fire Fighter Robot.

A Firefighter Robot is an autonomous or semi-autonomous robotic system designed to detect, prevent, and extinguish fires. It is equipped with sensors, AI, and robotic mechanisms to navigate through hazardous environments and assist in fire suppression.

7. Movable dust bin

It is Light weight and also pedal operator, this movable dustbin makes waste disposal a breeze. Effortlessly guide it across floors and keep your space clean.



8. Automatic car sensor Parking

Advanced sensors and cameras guide your vehicle into the parking spot, taking the stress out of parking simply shift into gear and let the system do the rest.

9.Smart trash bin.

The smart trash bin automatically detects and sorts dry and wet waste using an ultrasonic and moisture sensor. This system ensures efficient waste management, reducing manual effort.

10. Arduino Auto-Rain sheet for clothes.

It protects your cloths from unexpected rain shower with this innovative. Arduino powered automatic rain sheet.

Participant Experience:

A great participant experience in an exhibition ensures that attendees, exhibitors, and organizers have an engaging, informative, and seamless event. It includes interactive displays, networking opportunities, and immersive technologies to enhance engagement.

CLASS B

Cyber Security Based Projects

The exhibition aimed to showcase innovative projects and software applications developed by BCA students in the field of Cyber Security. This event provided a platform for students to demonstrate their technical skills, creativity, and problem-solving abilities in securing digital environments, protecting data, and mitigating cyber threats.

The exhibition aimed to showcase innovative projects developed by BCA students, highlighting their technical skills, creativity, and problem-solving abilities. The event featured a diverse range of projects covering networking, cybersecurity, artificial intelligence, data visualization, and software applications. Students actively engaged in presenting their ideas through working models, demonstrations, and interactive sessions, making the exhibition a dynamic learning experience.

The projects displayed included Star Network Topology, LAN & WAN, Cybersecurity, Types of Virus Attacks and Precautions, Agri-Based E-Commerce, E-Attendance, File Sharing System Offline, Data Visualization Using Tableau, Data Visualization Using Real-World Data, Blockchain Technology, Face Detection, AI-Based Smart Walking Stick, AI vs. Human Intelligence, College Website, and a Music Player. Each project addressed practical and emerging technological challenges, allowing students to apply their theoretical knowledge in real-world scenarios.

Through their participation, students gained valuable hands-on experience in designing, developing, and implementing technological solutions. The exhibition encouraged teamwork, effective communication, and the ability to troubleshoot and refine projects based on feedback. Additionally, students enhanced their research capabilities and confidence in presenting their work to faculty members, peers, and industry professionals. The event also fostered peer learning, industry exposure, and networking opportunities, helping students stay updated with the latest advancements in technology. Ultimately, the exhibition played a crucial role in preparing students for future career opportunities in the IT sector by equipping them with both technical expertise and essential soft skills. The success of the exhibition reflected the potential of young innovators in driving technological progress and contributing to society.







"Students capturing innovation in action, showcasing their creativity and technical brilliance!"

CLASS C

Gaming Zone

The **Gaming Zone** featured various interactive and engaging games, each designed to test different skills. A team of 19 students from the first, second, and third years conducted these games.





Games Conducted:

- 1. **IQ Game (8 Queen Problem)** A chess-related challenge where participants placed eight queens on an 8×8 chessboard without them attacking each other.
- 2. **Memory Game** Participants had 10 seconds to find 12 words related to a unique topic.
- 3. **Fun Game** Players attempted to flip bottles filled with different water levels into an upright position within 1 minute.
- 4. Puzzle Game A color cube was given, and participants had 30 seconds to solve it.
- 5. Connection Game Players viewed an image forming a word that connected to the next slide.
- 6. **Technical Game** A phishing detection challenge where participants identified fake websites.
- 7. **Typing Game** Analyzing participants' typing speed within a given time frame.
- 8. **Computer Bat and Ball Game** A computer-based game played according to rules set by the developers.
- 9. **Step on Shape** A game with six different shapes and sizes drawn on the floor, where 4 to 5 players participated while music played.

Participant Experience:

Participants actively engaged in the games, gaining knowledge and having fun. The event received positive feedback, with many expressing appreciation for the interactive and enjoyable experience.

CLASS D

Cyber Security and Networks Projects

1. virus attacks types and wifi hacking.

The first display about the virus attacks types and wifi hacking techinques and their awareness by III and I year additional students **Chinnaya K**, **Sankar**, **Muhammed eliyas**, **Trisha Jasmine**, **vinodhini**, The Team from the cyber security has won the **THIRD place** in the exhibition .



2.Geo location hacking

The second diaplsy is about Geo Loaction Haking , the students who worked on it was II years students and I year students srinath, vignesh, Shruthi - 1st year

The students on this display won the over all **FIRST place** in the exhibition. the project was ver useful to learn about the location hacking and it was very informative.



3. Live phishing of social media sites

The third display is about live Phishing attacks of social media attacks . the project was taken over by the II year students and I year students. The project was very informative about the phishing activity and its awareness . the participants were very eagerly partipated to gain the knowledge about the cyber phishing. The students who participated are HAREESH KUMAR, RITHISHKUMAR, ANANA DEEPAK ,NAVEEN BITO ,DANISH ,SANJAI S

4. MINI Networking Development:

The Students from II year and III years were the participants, they displayed a Miniature of the networking development and its history. The participants has a chance the learn about the networking developments from the initials state and the network which we use at present in a miniature display.



Overall Learnings to the participants:

Overall it was a great experience to the participants about cyber security and its hacking techniques and its awareness to avoid mal functions and the exhibition ensures that attendees, exhibitors, and organizers have an engaging, informative, and seamless event. It includes interactive displays, networking opportunities, and immersive technologies to enhance engagement.