Kanad Bhattacharya

Computer Science & Engineering Student

+91 79801 52963 | kanadb004@gmail.com | in/kanadb004 | kanadb004

Education

Vellore Institute of Technology **Chennai Campus**
B.Tech in Computer Science and Engineering *Aug 2023 – 2027*
CGPA: 9.06 / 10
Key Coursework: Data Structures, Algorithms, Structured & OOP, Operating Systems, Computer Networks, Cloud Computing, Probability & Statistics
Extracurricular: The Comedy Club

Experience

Research Intern *[Certificate]* *May 2025 – July 2025*
Indian Institute of Technology, Kharagpur *Kharagpur, WB, India*
Conducting research on a deep learning approach to unravel the initiation and progression of breast cancer, with a focus on identifying evolutionary trajectories using multi-omics data. Contributing to model development, data preprocessing, and an extensive literature review. A research paper based on ongoing findings is currently in preparation and is expected to result in a journal publication.

Data Science Member *Feb 2024 – Present*
IEEE Robotics And Automation Society VIT Chennai Student Chapter *Chennai, TN, India*
Contributed to collaborative robotics projects within the chapter, including a machine learning-based nutrition analysis project and other initiatives. Assisted in organizing technical sessions and actively participated in team discussions on robotics and automation.

Competitive Programmer *Feb 2024 – Present*
Newton School Coding Club, VIT Chennai *Chennai, TN, India*
Actively participate in regular coding contests, problem-solving sessions, and peer learning discussions focused on data structures, algorithms, and competitive programming platforms.

President *Apr 2024 – Present*
The Comedy Club, VIT Chennai *Chennai, TN, India*
Leading club operations, organizing and performing at campus-wide comedy events, open mics, and workshops to promote stand-up comedy and performance culture among students.

Projects

InfraSafe: Infrastructure Risk Detection System *Feb 2025 – Mar 2025*
YOLOv-based Crack Detection and Risk Assessment Platform
Developed a YOLOv-based deep learning pipeline for detecting structural cracks and assessing severity. Implemented a rule-based risk classifier and built a surveillance car prototype using an ESP32 camera for real-time monitoring. ML model and frontend were developed separately due to time constraints.

Women Safety and Crime Prevention Platform *Sep 2024 – Oct 2024*
Smart India Hackathon 2024 (2nd Level Qualified)
Built a Convolutional Neural Network integrated with LSTM to detect violence against women from CCTV footage. Implemented a fully functional frontend for user alerts, emergency contact triggers, and location-based reporting to aid real-time intervention and response.

Skills

Languages & Platforms: Python, C, C++, Java, R, GitHub, Linux, macOS, Windows
ML & Data Science: TensorFlow, PyTorch, NumPy, Pandas, Scikit-learn, Regression & Classification, Data Structures & Algorithms
Other Skills: Problem Solving, Continuous Learning, Creative Writing