




EDUCATION

- **Faculty of Technology, UoD** Delhi, India
Bachelor of Technology in Electronics and Communication; CGPA : 8.50 *Expected May 2027*
Minor in Artificial Intelligence & Machine Learning
- **Radiant Academy (CBSE)** Noida, India
Senior Secondary: 89.2% *2020-2022*
Higher Secondary: 94.6%

PROJECTS

- **HaritaX**  *University Project, April 2025*
 - Proposed **HaritaX**, a hybrid deep ensemble architecture integrating **VGG16**, **ResNet50**, **Vision Transformer**, and **Swin Transformer** via feature-level fusion for robust plant disease classification. Achieving **99.76% accuracy** on the PlantVillage dataset, demonstrating **state-of-the-art performance** and validating the effectiveness of **CNN-Transformer synergy** in real-world agricultural diagnostics.
- **Saferoad AI**  *Hackathon winning Project, March 2025*
 - Designed a real-time **car accident detection system** that utilizes a **YOLOv8** model trained on a custom dataset to work with a video feed from **CCTV or live stream**, detecting accidents in real-time and sending messages to the nearest hospital using a Maps API.
- **Finance Assistant Bot**  *Individual Project, December 2024*
 - Developed an **AI-powered financial chatbot** using **Groq** and the **Phidata API** for faster **LLM-based** responses using **LLaMA 3.1-70B Versatile** model with the **Yahoo Finance API**, achieving **85%** accuracy in stock recommendations with automated company fundamentals analysis, reducing manual research time for investors by **50%**.
- **HR/IT AI-Based Chatbot** *University Hackathon Project, October 2024*
 - Led a team of six, designed an **AI-powered chatbot** for HR and IT support, reducing query resolution time by **40%** integrating **TensorFlow**, **Hugging Face Transformer Models** with **Flask APIs**., ensuring **99% uptime** and cost optimization, saving organizations **Rs.5 lakh+ annually** on operational inefficiencies

RESEARCH AND PUBLICATIONS

Cracking the Code of Spotify Hits: The Impact of Data Preprocessing and Machine Learning Models, *Paper under review - April, 2025*

Analyzed 40,000+ Spotify tracks using machine learning to predict hit songs. Applied PCA for dimensionality reduction and compared four algorithms. Random Forest achieved optimal performance with 83.17% accuracy after hyperparameter optimization, demonstrating temporal dataset curation's significant impact on predictive modeling.

TECHNICAL SKILLS

- **Programming:** C/C++, Python, HTML, CSS, MySQL
- **ML Frameworks:** TensorFlow, Sci-kit Learn, NumPy, Pandas, PyTorch, Matplotlib, Seaborn, OpenCV, Pillow
- **Electronics Design & Simulation:** MATLAB, Simulink, LT Spice, NI Multisim, Ansys HFSS, CST

CERTIFICATIONS AND ACHIEVEMENTS

- **NITORI International Scholarship** for academic excellence for the academic year 2024-25 by NITORI International Foundation, Japan.
- **Machine Learning Specialization** by Stanford University via Coursera
- **Python for Data Science and AI** by IBM
- **Introduction to Computer Vision and Image Processing** by IBM