

Veekshitha Kurapati

Electronics & Computer Engineer

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Education

B.Tech in Electronics & Computer Engineering

Sept 2023 – Present

Mahindra University

CGPA: 7.5/10.0

Intermediate Education

Apr 2021 – Mar 2023

FIITJEE Junior College

Achieved 98.1% in XII Board Examination

Secondary Education

May 2020 – June 2021

DAV Public School (CBSE), Hyderabad

Achieved 96.2% in X Board Examination

Relevant Coursework

Courses: Data Structures & Algorithms, Design & Analysis of Algorithms, Optimisation Techniques for AI, Machine Learning, Database Management Systems, Computer Networks, Operating Systems, Digital Image Processing, Deep Neural Networks, Numerical Methods, Probability & Statistics, Discrete Math.

Projects

• AI-Powered Credit Card Fraud Detection and Response Platform

GitHub

- Built an AI-powered credit card fraud detection and response platform using React, FastAPI, Firebase, and machine learning to detect suspicious transactions in near real time and automate fraud-response workflows
- Engineered a hybrid fraud detection and response pipeline combining rule-based checks, supervised learning, and anomaly scoring to generate fraud labels, risk scores, explainable insights, and verification-driven case workflows for medium- and high-risk transactions.

Technologies: React, FastAPI, Firebase, Python, Scikit-learn, XGBoost, Isolation Forest, Tailwind CSS.

• Satellite Imagery Object Detection

GitHub

- Implemented **Faster R-CNN** with ResNet-50 backbone and **Feature Pyramid Network** on a Kaggle dataset to detect roads, buildings, and vegetation utilizing pre-trained weights for improved accuracy and faster convergence
- Performed hyperparameter tuning, including adjustments to learning rate, optimizer, and trainable layers to optimize model performance and feature extraction

Technologies: Python (torch, torchvision, PIL, scikit-image, OpenCV), Faster R-CNN, ResNet-50, YOLO annotations

• Airline Management

GitHub

- Developed both frontend and backend for a full-fledged Airline Management Website featuring functionalities like **flight booking**, **status checks**, **user profile management**, and an **admin panel** to manage flight details
- Implemented backend using **Node.js** and **Express.js**, with **React.js** for the frontend, and **MongoDB** for the database
- Integrated **real-time notifications** with **Socket.IO**, implemented user and admin authentication via **JWT**, and incorporated **Nodemailer** for email verification

Skills

Programming Languages: Python, Java, Verilog, C

AI/ML Frameworks: TensorFlow, PyTorch, Keras, Hugging Face Transformers

Libraries & Tools: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, NLTK, SpaCy

Databases: Firebase, MySQL Server, MySQL Workbench, SQL*Plus, Supabase

Web Development: HTML, CSS, Selenium, Beautiful Soup, Streamlit, Gradio

Version Control & Deployment: Git, GitHub, Google Colab

Awards & Achievements

Awarded academic Scholarship worth \$1,250 (100,000) for excellent academic performance in AY 2023-2024.

Awarded academic Scholarship worth \$1,250 (100,000) for excellent academic performance in AY 2024-2025.

Certifications

- **Amazon Web Services| National Small Industries Corporation** June 2025 – August 2025
 - Built a strong foundation in Cloud Computing and core AWS services such as EC2, S3, and IAM.
 - Gained hands-on experience in deploying and managing cloud resources.
- **Data Science and Business Analyst| BITS Hyderabad** June 2025 – August 2025
 - Completed training in Data Analysis and Business Analytics, performed exploratory data analysis and created visual reports using Excel and Python.
 - Developed an understanding of data-driven decision-making in business contexts.

Positions of Responsibility

Cultural Secretary — Mahindra University *June 2025 – Present*

- Served as the **central coordinator for cultural activities**, managing relationships with **multiple student clubs and cultural bodies** to ensure smooth collaboration and event execution across campus.
- Acted as the **primary liaison between student clubs and university administration**, resolving operational issues, facilitating approvals, and improving coordination for cultural initiatives.
- **Conceptualized and executed “VORTEX”**, a campus cultural initiative aimed at increasing student engagement and participation in extracurricular activities.
- **Planned and executed Orientation and Freshers**, organizing, scheduling, and program flow for 1,000+ students to enhance the new student onboarding experience.