Aarathisree Balla

EDUCATION

Pragati Engineering College

2022 - 2026

B. Tech in Computer Science & Engineering (Data Science): CGPA = 9.43

Andhra Pradesh, India

Relevant Coursework: Data Science, DBMS, Operating Systems, Computer Networks, Data Mining

EXPERIENCE

TaraConnect

Full Stack Developer February 2025 - April 2025

- Spearheaded the architecture and deployment of a Django-MySQL backend with Vercel-hosted frontend, enabling seamless brand-influencer collaborations.
- Streamlined user workflows with real-time dashboards, secure authentication, and profile filtering.
- Implemented in-app messaging with auto-moderation and activity tracking for policy enforcement.

Society for Data Science 🗹

Project and Research Intern

April 2024 - October 2024

- Developed an AI-powered automated answer evaluation system, improving grading efficiency by 80%.
- Trained Gemini 1.5 Pro models for OCR-based text recognition, achieving 86.5% accuracy.
- Co-authored IEEE paper on AI grading, improving accuracy by 23% across 200+ student assessments.

Infosys Springboard

Python Developer Intern

April 2024 - June 2024

- Designed a cheque extraction system (OpenCV, OCR) with 96% accuracy, reducing manual entry time by 70%.
- Constructed an automated SQL data pipeline handling 1K+ records/month, minimizing data discrepancies by 35%.

TECHNICAL SKILLS

Programming Languages & Principles: Python, Java, C, SQL, Data Structures & Algorithms, OOPs

Frameworks & Databases: Flask, Streamlit, Django, MySQL, MongoDB

Machine Learning & AI: Pandas, Numpy, Scikit-Learn, Matplotlib, Data Science, Gemini AI, OpenCV

Tools & Technologies: Git, VS Code, Power BI, HTML, CSS

PUBLICATIONS

IEEE PuneCon 2024 International Conference – Published "Revolutionizing the Future of Automated Subjective Answer Sheet Evaluation System with Machine Learning and LLMs."

PROJECTS

Digital Forensics [2] | Django, ResNet, PyTorch, Tesseract OCR, OpenCV, SQLite3, HTML, CSS, JavaScript

- * Engineered a Django-based web application for automatic forged document detection, utilizing a ResNet deep learning model to achieve 85%+ classification accuracy.
- * Integrated Tesseract OCR for text extraction and OpenCV for image preprocessing, improving document verification accuracy and processing time by 30%.
- * Deployed the solution to automate document authentication in legal, academic, and financial sectors, enhancing security and reducing manual verification by 40%.

CropXpert Z | Python, Machine Learning, Flask, Power BI, Deep Learning, HTML, CSS, JavaScript

- * Orchestrated a full-stack AI-driven platform integrating Decision Tree & Random Forest models.
- * Integrated pest detection using ResNet, achieving 93.5% accuracy, helping farmers optimize crop selection.

AI Chatbot for ease of Grievance Redressal Z | Python, Artificial Intelligence

* Automated grievance resolution with a flowchart-driven AI chatbot, reducing manual workload by 70%.

CERTIFICATIONS

- NPTEL IIT Madras: Python for Data Science(Elite) & The Joy of Computing using Python(Elite+Silver)
- Salesforce : Certified AI Associate

LEADERSHIP / EXTRACURRICULAR ACTIVITIES

- Recipient of Merit Certificate for Academic Excellence.
- Campus Mantri at GeeksforGeeks (Aug 2024 April 2025)
- Student Volunteer at Society for Data Science
- Contributor to Open-Source Projects: Hacktoberfest 2024, GirlScript Summer of Code 2024