# Aarathisree Balla

### **EDUCATION**

#### Pragati Engineering College

Sept 2022 - May 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

• Led the end-to-end development of a Django-MySQL application , enabling 850+ brand-influencer collaborations and reducing onboarding time by 40% through real-time dashboards and secure workflow optimization.

# Society for Data Science

Project and Research Intern

April 2024 - October 2024

- Implemented a Gemini 1.5 Pro-based LLM-OCR system to automate answer sheet grading with 86.5% accuracy and 80% time reduction.
- Fine-tuned evaluation logic for structured answer processing using OCR + prompt engineering.

## Infosys Springboard 🗹

Python Developer Intern

April 2024 - June 2024

- Developed a cheque processing pipeline using OpenCV and OCR, delivering 96% accuracy.
- Automated SQL ingestion for 1000 records/month with a 35% drop in manual errors.

#### **PROJECTS**

ForgeryNet 🗹 | Django, SQLite3, HTML, CSS, JavaScript, ResNet, OCR

- \* Engineered a Django-based web application for automatic forged document detection, utilizing a ResNet deep learning model to achieve 85%+ classification accuracy.
- \* Leveraged Tesseract OCR and OpenCV to enhance text extraction and preprocessing, boosting verification accuracy and efficiency by 30%.

CropXpert 🗹 | 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.

TrustRank - Algorithm 🗹 | Python, VADER Sentiment (NLP), Machine Learning, Streamlit

\* Created a trust-aware review ranking algorithm leveraging NLP, helpfulness, and time decay, outperforming traditional methods with a 0.93 Spearman correlation to ground truth rankings.

#### 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."

## **CERTIFICATIONS**

• NPTEL IIT Madras: Python for Data Science(Elite)

• NPTEL IIT Madras: 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