MOHAMMAD AYAAN SHAIKH

Solapur, Maharashtra • 8600301247 • ayaanskh23@gmail.com
Github:https://github.com/Ayaan-Skh LinkedIn:https://www.linkedin.com/in/ayaan-skh

SUMMARY

Machine Learning Engineer with strong foundations in algorithms and software engineering, experienced in building end-to-end ML pipelines for regression and predictive modeling. Skilled in model development, hyperparameter tuning, and evaluation using Scikit-learn, with deployment experience via Flask and WSGI for production readiness. Familiar with data preprocessing, feature engineering, and experimentation workflows. Expanding expertise into Deep Learning and NLP, while leveraging prior full-stack development background to design scalable, user-focused ML applications.

SKILLS

- ML/DS: Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn
- Programming: Python (Advanced), C++, Java, JavaScript, TypeScript
- Databases: MongoDB, PostgreSQL
- Deployment & Tools: Flask, WSGI, Docker, Git, GitHub
- Web Tech (Secondary): React.js, Node.js, Next.js, Express.js, WebSockets

PROJECTS

AI-Powered Mock Interview SaaS (Voice + Feedback) - Full-Stack SaaS Platform

- Live App: https://neuro-chat-git-main-ayaan-shaikhs-projects-c5391979.vercel.app/
- GitHub Repo: https://github.com/Ayaan-Skh/NeuroChat
- Developed a real-time, voice-based AI that simulates mock interviews tailored to specific job roles, helping users practice in a realistic setting.
- Engineered the platform using Next.js, Supabase, and Clerk, integrating the Vapi SDK to ensure smooth, low-latency voice interaction.
- Implemented a feedback system where the AI provides honest, contextual advice to help users improve their confidence and communication skills.
- Designed a user-centric dashboard to track and store all interview sessions, allowing users to revisit performance and monitor progress over time.

Structured ML Pipeline for Student Performance Prediction.

- GitHub Repo: https://github.com/Ayaan-Skh/End-to-end-ML-Project
- Engineered an end-to-end supervised learning pipeline to predict student academic performance using regression models.
- Designed and implemented modular components for data ingestion, preprocessing, feature engineering, and model training to ensure a reproducible and maintainable workflow.
- Optimized model accuracy by performing systematic hyperparameter tuning and comparing multiple algorithms, achieving a final
- R^2 score of 0.88.
- Architected and deployed a scalable prediction service using a Flask REST API and WSGI server, making the model accessible for real-world applications.
- Tech Stack: Python, scikit-learn, NumPy, pandas, Flask, WSGI.

Unsupervised Anomaly Detection System for Financial Transactions

- Developed an unsupervised anomaly detection system to identify potentially fraudulent financial transactions from highly imbalanced datasets.
- Evaluated multiple algorithms including Isolation Forest, DBSCAN, and One-Class SVM, selecting DBSCAN for its superior performance of
- 86% recall and 0.83 ROC-AUC.
- Constructed a reusable ML pipeline incorporating StandardScaler and PCA for preprocessing, designed for easy application to other domains like cybersecurity and IoT.
- Deployed the optimized model as a Flask REST API, providing a real-time anomaly scoring service for incoming transactions.
- Tech Stack: Python, scikit-learn, NumPy, pandas, Flask.

EDUCATION

B-Tech in Computer Science and Engineering | WIT, Solapur University | 2023 - 2027
CGPA: 9.4

HSC 12th | Walchand College of Arts and Science, Solapur | 2023
Percentage: 78.6%

SSC 10th | Little Flower Convent High School, Solapur | 2021
Percentage: 88%

ACHIVEMENTS

- Solved 350+ DSA problems across platforms like LeetCode, Coding Ninjas, Code chef with a Top 5% global ranking
- Achieved a rating of 732 on codeforces and a rating of 1041 on codechef.
- Consistently improving problem-solving speed and accuracy in real-time competitive environments

---

CERTIFICATIONS

- **Infosys Springboard:**
  Python Foundation Certificate
- **Infosys Springboard:**
  Introduction to Data Science
- **NPTEL:**
  Soft Skills Development