AKASH U

Chennai, India | +91-8925417161 | akash1932003@gmail.com

LinkedIn: linkedin.com/in/akash0011 | GitHub: https://github.com/akash764

Professional Summary

Enthusiastic Software Engineering student with strong programming skills in Python, experience building full-stack apps using Streamlit, and a solid foundation in data structures, algorithms, and OOP. Built AI and data-driven projects with predictive modeling, dashboarding, and API integration. Adept in problem-solving, agile development, and deploying scalable solutions. Actively learning distributed systems and cloud computing (AWS) to grow as an SDE.

Technical Skills

- Languages & Tools: Python (OOP, Pandas, NumPy, Matplotlib, REST APIs), SQL, MySQL, Regex, Git
- Development: Streamlit, REST APIs, GitHub, Jupyter, OpenAI API, Git in an agile workflow
- Data Visualization: Power BI (DAX, KPIs), Tableau, Excel (PivotTables, VLOOKUP, Charts)
- CS Fundamentals: Data Structures & Algorithms, OOP, Operating Systems, DBMS, LINUX(UBUNTU)
- Soft Skills: Problem-solving, Analytical Thinking, Documentation, Fluent English Communication
- Cloud (Learning): AWS (EC2, S3 beginner level)

Education

- B.E. Electrical and Electronics Engineering Panimalar Engineering College, Chennai (2021 –2025)
- Higher Secondary Certificate Holy Prince Matriculation Higher Secondary School – 71% (2020 - 2021)

Projects

AI Personal Finance Advisor

Link

Tools: Python, Streamlit, OpenAI API, Pandas, Matplotlib, Scikit-learn, GitHub, Streamlit Cloud.

- Built an AI-powered finance advisor using Streamlit, enabling predictive expense classification with 85% model accuracy.
- Engineered and preprocessed 5,000+ transactional records using Pandas and NumPy for
- Implemented supervised ML models using Scikit-learn to predict future expenses and savings with MAE under ₹500.
- Visualized trends and anomalies using Matplotlib and Plotly, improving user financial insights by
- Optimized model inference time to <500ms for real-time recommendations.
- Deployment: Hosted projects on Streamlit Cloud, ensuring end-to-end functionality and responsive user experience.

Stock Price Forecasting & Visualization Web App

Link

Tools: Streamlit, YFinance, Pandas, NumPy, Matplotlib, Plotly, Scikit-learn, TensorFlow (LSTM), Prophet, GitHub, Streamlit Cloud.

- Developed a Stock Forecasting Dashboard using Streamlit and Prophet to predict future stock trends with 90% directional accuracy.
- Collected and analyzed 10+ years of historical stock data via yfinance for time series forecasting.
- Applied Facebook Prophet model for daily and weekly forecasts, achieving RMSE under 2.5%.
- Integrated interactive visualizations using Plotly and Matplotlib to enhance user engagement.
 Reduced forecast computation time by 40% through optimized data pipelines and caching.
- Testing: Implemented basic unit tests and data validation checks for models and app input.
- Automation: Automated data preprocessing workflows and dashboard refresh pipelines.

Certifications

- Microsoft Python Development Professional Certificate
- IBM Data Analyst Professional Certificate
- Google IT Automation