

Manasi Suyal

📞 +91 9410345013 | manasisuyal2003@gmail.com | LinkedIn | GitHub | Portfolio

Profile

Detail-oriented Software Development Engineer (SDE-I) with expertise in building scalable data pipelines, RESTful APIs, and real-time machine learning systems. Proficient in Python, C++, and SQL with a strong foundation in Data Structures, Algorithms, and System Design. Experienced in full-stack development and database management, with a proven track record of optimizing system performance and automating complex data workflows.

Education

Graphic Era Deemed to be University

Bachelor of Technology in Computer Science and Engineering

Dehradun, India

Oct 2021 – June 2025

Technical Skills

Languages: Python, C++, Java, SQL, JavaScript, HTML/CSS

Developer Tools: Git, GitHub, Linux CLI, AWS (S3, EC2), Postman, VS Code

Libraries/Frameworks: Flask, React.js, NumPy, Pandas, OpenCV, TensorFlow, Scikit-learn

Core Concepts: Data Structures and Algorithms, OOP, DBMS, Operating Systems, REST APIs

Experience

Software Development Intern

Oct 2024 – Nov 2024

CodSoft (Remote)

- Developed a movie recommendation engine using TF-IDF vectorization and Cosine Similarity, reducing response latency by 30%.
- Built a real-time face detection module utilizing OpenCV and Python multithreading for optimized frame processing.
- Implemented an AI agent for Tic-Tac-Toe using the Minimax algorithm with Alpha-Beta pruning to optimize search efficiency.
- Managed version control and code reviews using Git and GitHub within an Agile development workflow.

Projects

Tableau Market Intelligence Engine | 🛠️ | *Python, SQLite3, REST APIs, Git*

- Architected a market analytics tool that automates data extraction from REST APIs into a local SQLite3 database.
- Developed a "Whale Activity" detection script to analyze volume-to-market-cap ratios, identifying high-liquidity trends.
- Built a visual CLI dashboard with dynamic bar charts and multi-criteria filtering for real-time data analysis.
- Engineered a data persistence layer with automated SQL refreshes and CSV export functionality for offline reporting.

Sign Language Detection System | 🛠️ | *CNN, TensorFlow, OpenCV, Python*

- Engineered a real-time ASL recognition system using CNNs, achieving 95%+ classification accuracy.
- Optimized inference speed to sub-150ms by implementing frame preprocessing modules for image normalization.
- Integrated pyttsx3 to provide real-time voice output, enhancing accessibility for hearing-impaired users.

Superstore Sales Analytics Pipeline | 🛠️ | *SQL, Power BI, Python, Flask*

- Processed 10K+ sales records using SQL and Pandas to perform Exploratory Data Analysis (EDA) on revenue churn.
- Developed a Flask API to serve processed data metrics, facilitating integration between database and visualization layers.
- Built interactive dashboards to track KPIs, customer segmentation, and regional sales performance.

Achievements

- **Naukri Campus Young Turks:** Ranked in the top 3.16% nationally among 50,000+ candidates (96.84 percentile) based on DSA and Core Engineering fundamentals.
- **Open Source Contributor:** Successfully contributed to Python backend logic and UI performance optimization during **Hacktoberfest 2025**.
- **Google Data Analytics:** Earned the Professional Certificate covering end-to-end data cleaning, SQL analysis, and visualization patterns.
- **Generative AI Certification:** Completed specialized training via LinkedIn Learning on LLM integration and prompt engineering for software workflows.