Omkar Jahagirdar

934-263-3316 | omkar.jahagirdar@stonybrook.edu | linkedin.com/in/omkar-jahagirdar | github.com/omkar3602

EDUCATION

Stony Brook University Stony Brook, NY
Master of Science in Computer Science *Aug. 2024 – Present*

Savitribai Phule Pune University Pune, India
Bachelor of Technology in Computer Engineering *Aug. 2020 – May 2024*

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C/C++, SQL
Frameworks: Django, Spring Boot, Pandas, Flask, Flutter, ReactJS, Tensorflow, Pytorch, LangChain
Tools and Technologies: AWS, Google Cloud, Git, Docker, Kubernetes, Terraform, Jenkins, Spinnaker
Databases: PostgreSQL, MySQL, MongoDB, Firebase, Firestore

EXPERIENCE

Software Engineering Intern May 2025 – Aug. 2025
SculptSoft LLC. *Remote - San Fransisco , CA*

- Developed an **AWS Kinesis**–based real-time ETL pipeline processing **50,000+** events per minute, integrating schema standardization, cleansing, and transformation logic to unify heterogeneous device data formats.
- Implemented a time-series data simulator for wind and solar plant devices, modeling **50+** operational parameters, producing **1M+** synthetic records daily with varying units and sampling frequencies.
- Built a high-performance **rule engine** executing **80+** business and operational rules to process data streams, apply business and operational rules, and detect anomalies, violations, and generate detailed operational reports.

Software Engineering Intern Jan. 2024 – Jun. 2024
JPMorgan Chase & Co. *Mumbai, India*

- Designed and implemented ETL pipelines to process over **20GB** of data daily from **85+** sources. resulting in **$150K+** annual cost savings by decommissioning legacy workflows.
- Engineered the backend architecture for a novel data correction tool employing **Spring Boot** and **Aurora PostgreSQL** on **AWS ECS**.
- Identified and resolved security vulnerabilities in the entire code base using **Raven** and increased test coverage of entire code base to 95+%.
- Utilized a CI/CD workflow using **Jenkins** and **Spinnaker**, and automated infrastructure management using **Terraform** achieving a 50% faster deployment cycle.

Software Engineering Intern Jun. 2023 – Jul. 2023
JPMorgan Chase & Co. *Bangalore, India*

- Developed end-to-end system by finetuning **BERT** model to identify data compliance violations, insider trading and information leaks by employees.
- Achieved **92%** accuracy using **transfer learning** on unlabelled email and chat data.
- Developed a compliance dashboard using **Dash** to identify and visualize inter-employee violation patterns.
- Dashboard was showcased as a prototype and used for compliance regulations.

PROJECTS

Enterprise Innovation Workflow System | *Python, Django, Tailwind CSS, AWS* | Link

- Engineered an idea-management system for **Bridgestone** with full **ideation-to-implementation lifecycle** support and implemented granular, role-based access controls.

Carbon Impact Analyzer | *Python, Machine Learning, Django, Tailwind CSS* | Link

- Developed an AI-powered web application that estimates a user's net carbon score using a XGBoost regression model, leveraging features derived from electricity usage, transportation patterns, and environmental factors.