SAURABH SAMPATKUMAR LOYA

+1 (801)-680-5240 | s.loya21@gmail.com | linkedin/saurabhloya | saurabhloya.github.io

SKILLS AND CERTIFICATIONS

Languages: Python, Java, C++, JavaScript, TypeScript, SQL
Frontend & Backend: Angular, React, Spring, Flask, Django, Apache Kafka, Apache Airflow, Apache Spark
ML/Data: NumPy, Pandas, PyTorch, TensorFlow, Scikit-Learn, Spacy, LangChain
Development & Visualization Tools: Git, Jira, Docker, Tableau, Power BI
Certification: AWS Certified Cloud Practitioner, Azure Fundamentals

EDUCATION

The University of Utah — Salt Lake City, Utah
Master of Science in Computer Science | GPA: 3.6/4 — Aug 2023 – May 2025

MIT World Peace University — Pune, India
Bachelor of Technology in Computer Science and Engineering | GPA: 3.8/4 — Aug 2017 – May 2021

WORK EXPERIENCE

BMW Financial Services NA — Salt Lake City, Utah
Data Scientist Intern — Jan 2025 - May 2025

- Collected, cleaned, and prepared lending data using **SQL and Python** to create a reliable dataset for a machine learning–based loan selection optimization model supporting $100M–$300M in daily originations.
- Engineered **40 features from 688 raw attributes** by applying feature engineering techniques to high-dimensional, unstructured data using **Pandas** and **NumPy**, enhancing model accuracy and data usability.
- Built interactive **Tableau** dashboards to visualize loan performance trends, enabling the Credit and Risk team to make informed decisions on a $9B+ financial portfolio.

H7 BioCapital — San Francisco, California
Software Development Intern — June 2024 - Sept 2024

- Crafted a full-stack scheduling application using **Django**, **HTML/CSS**, and **JavaScript** to streamline investor–startup interactions, reducing email coordination time by ~60%.
- Integrated **Google Calendar** & **Zoom API** to automate meeting creation, reminders, and calendar between investors and startups.
- Translated business requirements into well-defined technical stories in **Jira**, supporting **agile** development and implementation.

Volkswagen Group Technology Solution — Pune, India
Software Engineer — Aug 2021 - July 2023

- Engineered a global **SaaS survey platform** using **Java**, **Spring Boot and MySQL**, adopted by 10+ Volkswagen entities to streamline survey creation, distribution, and analytics across departments and geographies.
- Developed a **Query Management System** with **RESTful APIs** to automate HR inquiry routing, reducing average resolution time from **5 days to 3 days** and achieving approximately 40% improvement in turnaround.
- Developed a task automation solution using **Python**, **Selenium**, and **Apache Kafka** to replace manual RPA processes, reducing task time and cutting RPA license costs by over **$15,000 annually.**
- Optimized an **OCR pipeline** with **Azure Cognitive Services**, achieving 8x faster document processing and 15% accuracy gain.
- Integrated **LLM** and **NLP** into an internal chatbot, enhancing responses quality and expanding its knowledge base by 30%.
- Designed and tested backend services using **JUnit** and **Mockito**, validating business logic and API–database interactions.
- Resolved **100+ production issues** and refactored complex modules, strengthening codebase quality and system stability.

PROJECTS

- **Distributed Key-Value Store Using Raft Consensus Algorithm:** Implemented a fault-tolerant, replicated **key-value store in Golang** using Raft, ensuring strong consistency, linearizability, and 4s leader failover with log replication and persistence.
- **CITI Bike Rental Data Analytics and Forecasting**: Conducted **Exploratory Data Analysis** on 5M+ ride records and trained a predictive model using **Apache Spark** and Facebook Prophet, optimizing CITI Bike demand forecasts and inventory planning.
- **LLM based Recommendation System:** Crafted a medicine recommendation system using **Llama 2**, **LangChain**, and **Chroma DB** with Retrieval-Augmented Generation (**RAG**), achieving an **F1 score of 0.87** in providing relevant medication suggestions.
- **Android Malware Detection:** Compared various machine learning models from scratch including Neural Networks, Perceptron, and others, to detect malicious Android applications using system call frequency features, achieving a highest **F1 score of 0.89.**

HONORS AND RECOGNITION

- **Innovation Award** in recognition of creative thinking in automating training of chatbot using LLM project.
- **Achievers Award** for successful project deliverable with Customer Satisfaction Survey rated above 9.