SAURABH SAMPATKUMAR LOYA

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

SUMMARY

Solution-oriented Software Engineer with a Master's in Computer Science and 2+ years of work experience, specializing in Backend & Full-Stack Development, cloud computing, and distributed systems. Skilled in problem-solving and innovation, with a customer-centric approach to building scalable solutions and optimizing system performance for global enterprises.

SKILLS AND CERTIFICATIONS

Languages and Database: Python, Java, HTML, CSS, JavaScript

Database: MySQL, MongoDB

Framework & Libraries: Spring, Angular, Junit, Mockito, React, Flask, Django, Apache Airflow, Apache Spark, Apache Kafka,

Numpy, Pandas, Spacy, PyTorch, Tensorflow, Selenium

Visualization Tools & Development: Tableau, Power BI, Git, Jira, Docker, Microsoft Office, Microsoft Excel

Certification: AWS Certified Cloud Practitioner, Azure Fundamentals

EDUCATION

The University of Utah

Salt Lake City, Utah

Master of Science in Computer Science | Graduate Teaching Assistant | GPA: 3.9/4 Aug 2023 – May 2025

Coursework: Graduate Algorithms, Distributed Systems, Software and System Security, ML, NLP, Visualization

MIT World Peace University

Pune, India

Bachelor of Technology in Computer Science and Engineering | Merit List Scholarship | GPA: 3.8/4 Aug 2017 – May 2021

Coursework: Data Structures, Database Management System, Software Engineering and Project Management

WORK EXPERIENCE

Data Scientist Intern

BMW Financial Services NA

Salt Lake City, Utah

Jan 2025 - May 2025

- Prepared a high-quality dataset by performing **data mining**, **exploratory analysis**, **and data cleaning and validation** efforts, enabling the development of a machine learning-driven loan optimization model impacting \$100M—\$300M in daily originations.
- Executed intricate **feature engineering** on a high-dimensional **unstructured dataset** to identify key predictors for loan selection.
- Built interactive dashboards to track loan performance, enabling data-driven decisions for a \$9B+ financial portfolio.

Volkswagen Group Technology Solution

Software Engineer

Pune, India

Aug 2021 - July 2023

- Engineered a global survey platform adopted by 10+ Volkswagen entities as a scalable **Software as a Service (SaaS) solution**, enabling efficient multi-region survey creation, distribution, and analytics to drive data-informed decision-making.
- Developed a Query Management System application with backend automation and RESTful APIs to streamline inquiry routing, enhance tracking transparency, and reduce resolution time for HR inquiries across departments.
- Built and optimized an invoice-based OCR pipeline using advanced image processing techniques and **Azure** Cognitive APIs, achieving an 8x speedup in document processing and **15% improvement** in data extraction accuracy.
- Integrated LLM and NLP into an internal chatbot, enhancing human-like responses and expanding its knowledge base by 30%.
- Designed and tested backend services using **JUnit** and **Mockito**, validating business logic and API-database interactions.
- Collaborated in **Agile** ceremonies, contributed to **peer code reviews** and **CI/CD** pipelines to deliver reliable, maintainable software.
- Led the refactoring of complex modules and **resolved 50+ production issues**, strengthening codebase quality and system stability.

PROJECTS

- **Distributed Key-Value Store Using Raft Consensus Algorithm:** Developed a fault-tolerant, replicated key-value store in Golang using Raft, ensuring strong consistency, linearizability, and 4s leader failover with log replication and persistence.
- Scheduling Platform for VCs: Designed and developed a scheduling system to streamline investor—entrepreneur interactions by automating meeting coordination, reducing manual follow-ups, and improving workflow efficiency.
- **CITI Bike Rental Data Analytics and Forecasting**: Conducted EDA on 5M+ ride records and developed a predictive model using Apache Spark and Facebook Prophet model, optimizing CITI Bike demand forecasts and inventory.
- **LLM based Recommendation System:** Crafted a medicine recommendation system using Llama 2, LangChain, and Chroma DB with Retrieval-Augmented Generation (RAG), achieving 90% accuracy in providing medication.

HONORS AND RECOGNITION

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