

SAURABH SAMPATKUMAR LOYA

Salt Lake City, Utah (**Open to Relocation**) | +1 (801)-680-5240 | s.loya21@gmail.com | [linkedin/saurabhloya](https://www.linkedin.com/in/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: Python, Java, C/C++/C#, Golang, R, HTML, CSS, JavaScript, TypeScript, SQL, NoSQL

Framework & Libraries: Spring, Angular, React, Flask, Django, Numpy, Pandas, Spacy, PyTorch, Tensorflow, Apache Airflow, Apache Spark, Apache Kafka, Selenium, LangChain

Visualization Tools & Development: Tableau, Power BI, D3.js, Git, Jira, Docker, Microsoft Office, Microsoft Excel

Databases: MySQL, PostgreSQL, MongoDB, ChormaDB, Pinecone

Certification: AWS Certified Cloud Practitioner, Azure Fundamentals

EDUCATION

The University of Utah

Master of Science in Computer Science | **Graduate Teaching Assistant** | **GPA: 3.9/4**

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

Salt Lake City, Utah

Aug 2023 – May 2025

MIT World Peace University

Bachelor of Technology in Computer Science and Engineering | **Merit List Scholarship** | **GPA: 3.8/4**

Pune, India

Aug 2017 – May 2021

WORK EXPERIENCE

BMW Financial Services NA

Data Scientist Intern

Salt Lake City, Utah

Jan 2025 – May 2025

- Developed machine learning-driven loan selection optimization model, ensuring the most profitable loans are approved from a pool of booked loans, effectively maximizing profit and reducing risk for daily loan originations of **\$100M–\$300M**.
- Executed intricate **feature engineering** on a high-dimensional **unstructured dataset** to identify key predictors for loan selection.
- Utilized SQL, Tableau and ETL processes for comprehensive analysis and reporting for a **\$9B+ asset portfolio**.

Volkswagen Group Technology Solution

Software Engineer

Pune, India

Aug 2021 - July 2023

- Engineered a global survey platform for Volkswagen Group as a scalable **Software as a Service (SaaS)** solution to facilitate seamless survey administration and widespread adoption across entities.
- Developed Query Management System with integrated workflows, leading to a **40% improvement** in tracking and resolution of HR inquiries, enhancing overall efficiency and response time.
- Implemented and optimized an Optical Character Recognition (OCR) pipeline using Azure Cognitive Services for invoice scanning, achieving an 8x speedup and **15% accuracy improvement** in extracting invoice details.
- Elevated the intelligence of the chatbot by integrating Large Language Model (LLM) and advanced NLP technologies, driving to a **30% improvement** in its knowledge base through comprehensive analysis of user interactions and diverse data sources.
- Innovated a task automation solution with Python, Selenium, and Apache Kafka achieving a **60% reduction** in task completion time, eliminating the need for RPA, leading to significant operational cost savings.
- Resolved **50+ production issues** and led the refactoring of a **2 complex projects**, enhancing code quality and maintainability.

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 scheduling system to streamline investor-entrepreneur interactions, enhanced workflow efficiency, and reducing manual efforts by 70%.
- 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.