SAURABH SAMPATKUMAR LOYA

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SKILLS AND CERTIFICATIONS

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

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

Visualization Tools & Development: Power BI, Tableau, 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 **Aug 2023 – May 2025**

Master of Science in Computer Science | **Graduate Teaching Assistant** | **GPA: 3.9/4** Salt Lake City, Utah, USA

Coursework: Advanced Algorithm, Computer Architecture, Deep Learning, Software and System Security, Manage Data for ML, Distributed Systems, Visualization for Data Science, Natural Language Processing(NLP)

MIT World Peace University **Aug 2017 – May 2021**

Bachelors of Technology in Computer Science and Engineering | **Merit List Scholarship** | **GPA: 3.8/4** Pune, India

Coursework: Data Structure and Algorithms, Operating Systems, Computer Networks, Software Modelling and Design, Database Management System, Data Warehouse and Data Mining, Big Data Analytics, Machine Learning, Artificial Intelligence, Business Intelligence, Cloud Computing, UIUX, Finance and Costing

WORK EXPERIENCE

H7 BioCapital **June 2024 – Current**

Software Development Intern San Francisco , California, USA

- Designed and implemented a scheduling system for the H7 Accelerator Program using **Python, Django, and SQL**.
- Collaborated with **cross-functional teams** to gather requirements and translate them into technical solutions.
- Integrated **Google Workspace APIs** and developed a user-friendly interface for efficient scheduling management and enhanced functionality.

Volkswagen Group Technology Solution **Aug 2021 - July 2023**

Software Engineer Pune, India

- Engineered a global survey tool for Volkswagen Group as a "**Software as a Service**" solution using **Java, Angular, SQL** and **REST APIs** 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.
- Analyzed and optimized an **OCR** based invoice scanning model leveraging **Azure Cognitive services** to extract key information like invoice number and vendor details, resulting in **8x time speedup** and a **15% improvement in accuracy.**
- Elevated the intelligence of the chatbot (AISHA) by using advanced NLP technologies and integrating LLM, leading 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 and contributing to **cost savings of $3 million**.
- Resolved **35+ production issues**, including data quality and performance bottlenecks, and led the refactoring of a **12 complex projects**, enhancing code quality and maintainability.

PROJECTS

- **LLM based Medicine 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 recommendations and side effect insights
- **CITI Bike Rental Analytics and Forecasting:** Directed the development of a predictive model using **Apache Spark** and **Facebook Prophet** for CITI Bike rental analytics, facilitating precise daily demand forecasts and enhancing inventory efficiency.
- **AutoBotTrain:** Expanded an automated system leveraging the **T5 model** to streamline chatbot training by generating diverse utterances and responses, enhancing user interactions resulting in **70% reduction in manual effort** and **30% faster training timeline**.
- **IOT based Smart Traffic Management System**: Designed and implemented Smart Traffic Management System using Arduino, RFID, and LED signals to expedite emergency vehicle response and enhance overall road safety.

HONORS AND RECOGNITION

- **Innovation Award** in recognition of creative thinking in AutoBot Train Project
- **Achievers Award** for successful project deliverable with Customer Satisfaction Survey rated above 9