

SAURAV MESTRY

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MSMIS graduate and **backend developer** with **3 YOE** in **Java Spring Boot microservices, RESTful APIs, SQL optimization, and CI/CD**. Improved code efficiency by 20%, automating workflows to achieve 20% boost in outcomes. Skilled in **event-driven architecture, Docker, and Apache Kafka, distributed systems**, with excellent **communication, and mentoring** abilities in cross-functional teams

Education

University of Arizona, Eller College of Management

Masters in Management Information Systems & Minor in Business Intelligence

Aug 2023 - Dec 2024

GPA - 4.0/4.0

Indian Institute of Technology Kanpur

Bachelors-Masters in Computer Science & Electrical Engineering (EECS)

Aug 2016 - Oct 2021

GPA - 3.5/4.0

Professional Experience

Graduate Research Assistant, Dr. Joe Hoover, Hoover Research Lab | University of Arizona

Jan 2024 - Dec 2024

- Developed and deployed a **private AI service** using a custom-built **RAG pipeline** with **FAISS** clustering with **LLAMA 3.2-3B** model
- Created **dimensional models** using **Snowflake** schema and leveraged **PySpark API** for processing, transformation of **5 million rows**
- Migrated ETL pipeline on **Apache Airflow** as **DAG** for better monitoring of **data workflow** and orchestration via **Docker deployment**
- Built interactive **dashboard** using **Power BI** for analytics reducing SQL dependencies and **no-code development**

Software Engineer, Center for Development of Advanced Computing | India

Aug 2021 - Feb 2023

- Developed and maintained **microservices** in **Java** using the **Spring Boot** framework, resulting in a **20%** reduction in code complexity
- Produced a suite of **RESTful microservices** and **APIs** including **6 customized endpoints**, seamlessly integrated internal web services
- Mentored a team of **3 Engineers**, facilitating a seamless transition and efficient operations, **boosting** project outcomes by **20%**
- Developed complex **SQL** queries for **Oracle** RDBMS, enhancing **query performance** by **35%** through optimization

Data Science Intern, General Electric, Healthcare | India

May 2019 - Jul 2019

- Led a collaborative e-commerce sales data project with a focus on improving **customer segmentation** and **churn prediction**
- Utilized **K-means clustering, Principal Component Analysis (PCA) & optimization** on Customer-Product dataset to extract insights
- Utilized **sentiment analysis** on product and customer reviews, achieving a **76% accuracy** rate in understanding behavioral analysis
- Actively managed the **agile** aligned delivery of strategic insights catalyzing **5% improved efficiency** in business performance

Projects

Full Stack Developer, Cortland Las Casas | Tucson, AZ

Jan 2024 - May 2024

- Designed and implemented a **microservices backend** architecture (JWT Auth) with a **monolithic frontend**, enabling **scalability**
- Expanded a **MERN (MongoDB, Express, React, NodeJS)** stack application and designed and tested **RESTful APIs** using **Postman**
- Leveraged **React Router** and **Context API**, optimizing routing and enhancing user experience with stateful React & **Tailwind CSS**
- Implemented **CI/CD pipelines** using **GitHub** Actions for automated testing and deployment, reducing deployment time

Database Architect, University of Arizona Library | Tucson, AZ

Aug 2023 - Dec 2023

- Conducted **consultations** with clients to gather business requirements, producing a **40-entity** complex **conceptual data model**
- Designed a streamlined logical schema model, **reducing redundancy by 30%** and addressing the needs of all stakeholders
- Implemented physical design using **SSMS** based database system, ensuring flexibility, data integrity using **PL/SQL**
- Developed an **ETL** pipeline using **SSIS**, incorporating **SQL Server Agent** for scheduling, error handling for data flow to the server
- Delivered project under deadlines achieving **cost savings** of **\$40,000** by bringing data services in-house, enhancing reliability

Data Engineer, Data Mining | University of Arizona

Aug 2023 - Oct 2023

- Established a **centralized data lake** on **Amazon S3** to store data from multiple sources, ensuring data scalability, improving flexibility
- Led the development of a data infrastructure, enabling **data ingestion** from **Youtube Data API**, transforming into a structured format
- Leveraged **AWS services**, including **IAM, Glue, Lambda, and Athena**, to build a cloud-based ecosystem generating actionable insights

Skills

Languages/Databases

Java, Python, C++, R, Scala, HTML, CSS, JavaScript, MongoDB, PostgreSQL, MySQL, MS SQL Server

Tools & Frameworks

Spring Boot, ReactJS, ExpressJS, NodeJS, TailwindCSS, Git, Docker, VS Code, IntelliJ, PyCharm, Postman

Data & Cloud Technologies

Apache Spark, Hadoop, Apache Airflow, Apache Kafka, AWS (S3, EC2, Lambda, Glue, Aurora, Redshift)

Microsoft BI (PowerBI, SSIS, SSMS, SSAS)