JOSEPH MOHANTY

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EDUCATION

Rice University

Aug 2023 - Dec 2024

M.S in Computer Science (Data Science and Machine Learning) GPA: 3.7/4.0

Relevant Coursework: Machine Learning, Probabilistic Data Structures, Project Management

Manipal Institute of Technology

Jul 2018 - Aug 2022

B. Tech in Computer Science (Minor: Computational Intelligence) GPA: 3.5/4.0

Relevant Coursework: Computer Networks, Operating Systems, Database Management

EXPERIENCE

Script Care, Ltd

Austin, TX, USA

Software Developer (Go, Redis, ReactJS, GitLab, MS SQL)

• Built GoLang APIs to automate password resets for Tredium, a pharmacy claims and management platform, implementing distributed locking to prevent race conditions, with secure password generation, and Redis token caching — reducing token retrieval time.

• Developed features and resolved production issues for EmpiRx Health's pharmacy benefits platform, managing incoming tickets and implementing enhancements to meet client requirements, consistently resolving high-priority issues within SLA and reducing average resolution time by 15%.

Rice University
Software Research & Development Intern (C++, CUDA, Python, GitHub Actions, LLMs)

Houston, TX, USA

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Manipal, KA, India

March 2025 - Present

May 2024 - Dec 2024

• Developed the **Ein-Summable** system for efficient machine learning tasks, optimizing tensor operations using MLIR and CUDA, **achieving 30% faster computation**.

- Integrated Llama 3 with CUDA for large language model inference, reducing latency by 40% on tasks.
- Facilitated the setup of CI pipelines, reducing deployment cycles by 50% and ensuring 95% code coverage.

UBS Pune, MH, India

Software Engineer (Java, SpringBoot, Oracle SQL, Kafka, Shell Scripting)

Jul 2022 - Jul 2023

- Led bi-weekly code release activities; Deployed application enhancements; improving client satisfaction by 30%.
- Drove the design and implementation of Shell Scripts, reducing manual workloads by 15%.
- Collaborated on code reviews with cross-functional teams, fostering knowledge sharing and improving development speed by 20%.

Software Engineering Intern (Python, Oracle SQL, Unix, Agile, Scrum)

Jan 2022 - Jun 2022

- Automated mapping of ESG files, reducing manual effort by 70%.
- Coordinated analysis of downstream data, uncovering key trends and insights; improving quality of deliverables by 60%.

NTT Data Payment Services

Mumbai, MH, India

Product Engineering Intern (Java, JUnit, Mockito, SpringBoot, SonarQube)

Jan 2021 - Sept 2021

- Extraction of Merchant IDs using Python; Reduced errors in pre-processing by 80% by eliminating faulty IDs.
- Implemented Unit Tests for an Online Transaction Switch (OTS) and ensured code coverage to be greater than 90% using SonarQube.

TECHNICAL SKILLS

Programming Languages: Python, Java, C/C++, JavaScript, Go

Databases: MS SQL Server, Oracle SQL DB, PostgreSQL, MongoDB

Libraries/Frameworks: PyTorch, TensorFlow, Django, Flask, Spring Boot, ReactJS, NodeJS, GraphQL, JUnit, Mockito

DevOps and Tools: GitHub Actions, Jenkins, Linux, Kafka, Kibana

PROJECTS

URL Shortener Rice University

• Implemented the backend using **GoLang** to deliver high-concurrency capabilities and efficient processing for handling heavy workloads, **achieving reductions in latency.**

- Engineered a high-speed URL retrieval and storage system by implementing MongoDB's horizontal scaling features, which enabled seamless handling of over 500 concurrent requests during peak traffic periods without performance degradation.
- Developed RESTful APIs for creating, retrieving, and managing shortened URLs, achieving a 99.9% uptime during stress testing with 1,000+ concurrent requests.