Utkarsh Tiwari

WORK FXPERIENCE

COHESITY | Member of Technical Staff 2

Pune, Maharashtra | Feb 2024 - Present

- Designed and implemented a wrapper library in **Go** utilizing channels and goroutines to optimize memory usage and improve file system operation performance.
- Developed a **secure distributed file system client** using **gRPC**, enabling efficient and encrypted data transfer across backup and restore workflows.
- Delivered the Go client that is **consumed by the MongoDB adapter**, contributing directly to a **multi-million-dollar** delivery for a renowned global bank.
- Engineered and optimized multiple workflow support for the Testing adapter within the adapter framework (Backup, Restore, Point In Time Recovery, Log backup), enabling dynamic sub-task orchestration and faster validation of diverse use cases.
- Enhanced the **core data protection framework** by enabling automated testing for critical workflows, reducing manual quality assurance effort, and improving reliability.
- Conducted R&D and authored design documentation for optional refresh and multi-adapter support, along with migrating helper library clients to **secure gRPC** on primary service workers.
- Achieved more than **90% unit test coverage** for key modules, ensuring robust and maintainable code across distributed components.

AMAZON | SOFTWARE DEVELOPMENT ENGINEER INTERN

Bengaluru, Karnataka | Jul 2023 - Dec 2023

- Led the development and implementation of a high-impact feature, streamlining the handling of large data quantities on the internal orchestration engine; employed AWS CDK to create essential resources, establish seamless connections with downstream services, optimize data for a better user experience, and meticulously tested the feature's performance using unit tests.
- Enhanced metric logging and data tracing for various services where the feature was enabled using **AWS Cloudwatch**, **SLF4J library**. This improved resolution and improvement of tickets.
- Developed comprehensive **UML diagrams** and meticulously documented feature implementation, resulting in a **40%** reduction in bug fixes and facilitating seamless collaboration among cross-functional teams.

GOOGLE SUMMER OF CODE 2022 AT CDLI | STUDENT DEVELOPER

Remote | Jun 2022 - Sept 2022

• Spearheaded the creation of a **user-centric**, **space-efficient** view for website elements, resulting in enhanced usability of forms, search page UI, and artifacts; led to a **35%** improvement in **website navigation** and increased average **session duration** by **20%** for the open-source project - **Design Challenge I** and introduced new features (Citation, Raw image scan, Resources dropdown) while maximizing website responsiveness using **Bootstrap**.

MSYS TECHNOLOGIES | SOFTWARE ENGINEER INTERN

Chennai, India | Jun 2021 - Jul 2021

• Engineered the backend infrastructure for **GitBoard**, a web application project, utilizing **NodeJS** and **ExpressJS**; integrated **MongoDB** to store and retrieve data, designed and executed **REST APIs** leveraging the **GitHub APIs**, resulting in better data visualization and augmented monitoring features for multiple git repositories.

EDUCATION

Birla Institute of Technology and Science, Pilani

Hyderabad, Telangana | Aug 2019 - Aug 2024

B.E. COMPUTER SCIENCE WITH M.Sc. BIOLOGICAL SCIENCE

Current CGPA: 8.40

Relevant CourseWork: Data Structure and Algorithms, Design and Analysis of Algorithms, Database Systems, Object Oriented Programming (OOPs), Cryptography, Operating Systems, Blockchain

SKILLS

Languages: Java, Git, SQL, C++, Python, PHP

Web Development: React, JavaScript, TypeScript, HTML/CSS

Technology: Git, AWS, Docker, LaTeX, MongoDB, DynamoDB, JUnit, Mokito, Dagger