Rahul Bagul

Indiana, USA, 46835

Education

Purdue University

Aug 2023 – May 2025

Master of Science in Computer Science

Indiana, USA

Sinhgad College of Engineering (Pune University)

Aug 2017 - May 2021

Bachelor of Engineering in Information Technology

Pune, India

Work Experience

Snowflake

May 2024 - Aug 2024

Salesforce, Data and AI Intern

San Mateo, USA

- Enhanced error detection by 15% through advanced root cause analysis of Salesforce logs using Snowflake's LLM functions and models like LLAMA3.2 and Mistral large for detailed log processing.
- Automated 60% of test class generation and reduced security vulnerabilities by fine-tuning LLMs and implementing Retrieval Augmented Generation (RAG).
- Designed databases, schemas, tables, and views in **Snowflake** to optimize data handling and transformation.

Snowflake Software Developer-Salesforce

June 2021 - July 2023

Pune, India

- Integrated REST and SOAP APIs for seamless data exchange between Salesforce and external systems, implementing security protocols such as **OAuth 2.0**, achieving a 20% increase in operational efficiency.
- Developed and implemented asynchronous and synchronous processing techniques, utilizing data structures and system design to handle large data set, enhancing system performance, and resulting improvement in user experience.
- Created SQL-based ETL dashboards that provided immediate analysis of sales trends, reducing reporting time by 40% and empowering stakeholders with actionable insights.
- Built and refined responsive web applications with **React and Lightning Web Components (LWC)**, implementing dynamic UI elements using CSS and Bootstrap for cross-platform compatibility.
- Enhanced system performance by reducing page load times by 30% and improving code maintainability through refactoring of legacy Apex code and implementing a modular, component-based architecture.
- Facilitated **code reviews** to ensure high code quality and adherence to standards.

Projects

CPP Quiz Game $\mid C++$

October 2024

- Developed a Crow-based C++ web application enabling dynamic user interaction, including random question generation, real-time scoring, and secure session management, with a focus on efficient request handling and modular design.
- Implemented threading and queue-based request processing to manage concurrent user actions, ensuring high-performance operations and seamless data consistency by serializing score updates in a JSON file.

GroupSnap | React, Express, PostgreSQL

August 2024

- Built a full-stack web application with React, Express, JWT, and PostgreSQL for anonymous photo sharing in groups, implementing secure user authentication and role-based access control.
- Utilized React's Context API for state management and implemented asynchronous photo upload handling.
- Designed and implemented a scalable system architecture to manage user roles, content moderation, and secure identity handling.

Faculty Information Management System | Java, SQL, JavaFX

January 2019

- Developed a server-client system for college administrators, utilizing MySQL and JDBC for robust database management, including complex SQL queries, data relations, and joining techniques.
- Created a user-friendly interface with JavaFX and Java, improving accessibility for all users.
- Collaborated with a team to integrate various system components, ensuring seamless operation across the college network.

Technical Skills

Programming Languages: C++, Python, Java, JavaScript, SQL, Apex, C#, Shell Scripting

Frameworks: Express, React, Spring boot Databases: MySQL, PostgreSQL, MongoDB

Other Skills: Docker, Git, Terraform, AWS, REST API, Snowflake, Unity, Node.js, Google Cloud, STL, VS Code, Linux