

ROHIT PARTHIBAN

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[Rohit-Parthiban-LinkedIn](#)

SUMMARY

Dynamic and results-oriented Software Engineer with expertise in Java, Python, and microservices architecture, specializing in building scalable, fault-tolerant systems. Proven experience across backend development, cloud deployment (AWS), Restful APIs, and AI-driven applications. Adept at driving innovation through collaborative teamwork, high-quality code, and efficient system design.

EDUCATION

Master of Science in Computer Science and Engineering

Jun 2025

Santa Clara University, Santa Clara, CA, USA, CGPA: 3.756

Coursework: Computer Architecture, Design Analysis and Algorithm, Object-Oriented Analysis, Design and Programming Advanced Operating Systems, Computer Networks, Distributed Systems, and Machine Learning.

Bachelor of Technology in Information Technology

Apr 2023

Anna University, Chennai, TN, India, CGPA: 3.7

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, Python, C, C++, HTML, CSS, SQL

Databases: MySQL, Oracle, Snowflake, MongoDB

Frameworks & Tools: Git, GitHub, Spring Boot, Node.js, Flutter, React.js, IBM Kubernetes, JavaFX, Figma, Linux, VMware

Cloud Platforms: Amazon Web Services, Azure, IBM Cloud

PROFESSIONAL EXPERIENCE

Software Application Developer Intern, SCU Frugal Innovation Hub

Jan 2025 – Present

- Developing a bilingual educational Science-based mobile application focusing on the solar system and space to enhance English and Spanish language skills.
- Implementing fun gamification features with progress tracking to increase student engagement.
- Further Utilizing Flutter and GitHub for full-stack development and project management.

Application Developer, Ecopez Technologies Private Limited

May 2023 – Aug 2023

- Collaborated with Product Leaders to design and develop a software application for School talks, enhancing user interaction and engagement.
- Coordinated with the development team to build a school student community application, resulting in a 50% increase in user engagement.
- Leveraged Java, JavaScript, HTML, and CSS to enhance application efficiency and optimize the user experience.

Backend Application Developer Intern, Arihant Gyp Ply And Lam

Aug 2021 – Dec 2021

- Developed services to support the sales memo use case and deployed the application in Amazon Elastic Cloud instances, resulting in a 75% improvement in system reliability and performance.
- Scaled the service in AWS through Auto Scaling and Load Balancing, handling increased traffic and ensuring seamless performance.
- Utilized HTML, CSS, Java, and JavaScript to enhance application performance and user experience.

ACADEMIC PROJECTS

RAG System for Email Queries-[GitHub-Rag-System](#)

Sep 2024 - Dec 2024

- Implemented an advanced Retrieval-Augmented Generation (RAG) pipeline with ChromaDB for context-rich email query handling.
- Boosted domain-specific accuracy by 25% through fine-tuning a Gemma LLM with LoRA using Databricks Dolly datasets.
- Streamlined email data retrieval by integrating Google Takeout parsing and vector embeddings.
- Orchestrated multi-step AI workflows with LangChain, significantly reducing manual oversight.
- Leveraged Python, LangChain, ChromaDB, LoRA, GPT4All, and llama.cpp for robust development and deployment.

Real-Time Sports Score Updates-[GitHub-Score Update](#)

Apr 2024 – June 2024

- Collaborated with a cross-functional Agile team to develop a distributed publish-subscribe system in Spring Boot, achieving real-time sports score updates with sub-second latency through strong problem-solving approaches.
- Implemented a fault-tolerant leader election mechanism that cut recovery time by 40% during broker failures.
- Ensured data consistency across brokers through logical clocks, maintaining 99% message reliability under concurrent loads.
- Scaled horizontally to handle a 30% increase in simultaneous publisher-subscriber traffic with no performance degradation.
- Utilized Spring Boot, RESTful APIs, Java concurrency, and distributed system algorithms for robust, efficient deployments.

Automated Simulation Garden-[GitHub-Automated Garden](#)

Apr 2024 – June 2024

- Led a collaborative Agile team to develop an interactive garden simulation in Java and JavaFX, featuring a responsive UI layout for enhanced visualization.
- Ensured robust object-oriented design to deliver realistic ecosystem interactions, leveraging data-driven decision-making to integrate dynamic weather simulation and advanced pest control algorithms.
- Improved system reliability by 90% and achieved real-time responsiveness through comprehensive testing and concurrency optimizations.
- Demonstrated expertise in high-availability application development, maintaining 24-hour crash-free performance under production-like loads.