

ATHENA MARIANNE LOBO

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SUMMARY

Experienced in web application development with React, FastAPI, Spring Boot, and C++ for performance-critical modules. Skilled in building scalable software systems, optimizing performance in Unix/Linux environments, and deploying microservices with Docker/Kubernetes. Strong communicator with proficiency in English, and experience with agile methodologies, pursuing an M.S. in Computer Science at USC and aiming to contribute to development of innovative software solutions.

EDUCATION

University of Southern California Los Angeles, CA
Master of Science - Computer Science August 2025-May 2027
Relevant coursework: Web Technologies, Analysis of Algorithms, Machine Learning, Database Management

Ramaiah Institute of Technology Bangalore, KA, India
Bachelor of Engineering- Information and Computer Science August 2019-July 2023
Relevant coursework: Data Structures, Mobile Application Development, Computer Networking, Natural Language Processing

TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript/TypeScript
Frontend: React.js, Vue.js, Tailwind, Redux
Backend: Node.js, Express, FastAPI, Spring Boot, REST APIs, Microservices
DevOps: Docker, Kubernetes, GitHub Actions, Keycloak, CI/CD
Databases: PostgreSQL, MongoDB, MySQL

EXPERIENCE

CAST Software Bangalore, IN
Software Development Engineer II January 2023-July 2025

- Engineered a React.js + Java Spring Boot SaaS platform leveraged by 1K+ enterprise clients, reducing information retrieval times by 35% and scaling throughput from 300 to 1200 route loads/sec
- Implemented multi-tenant authentication with Keycloak, achieving 99.9% uptime and 10K+ daily logins across 25+ geographies
- Built and deployed a metadata analysis engine in Python, supporting 500+ programming languages and enabling deployment in both cloud and Unix/Linux environments
- Designed and integrated microservices with PostgreSQL and MongoDB, enhancing data retrieval speeds by 40% vs. legacy architecture and enabling cross-service scalability
- Constructed CI/CD pipeline automation with Docker, Kubernetes, and GitHub Actions, cutting deployment time by 50% (from 2 hrs → 1 hr) and ensuring seamless releases; documented deployment procedures to improve onboarding and developer training
- Ensured to regularly collaborate with cross-functional teams on architecture reviews and debugging; mentored 6 junior developers through code reviews, pair programming and internal training sessions

MSR University of Applied Sciences Bangalore, IN
Student Worker - Full Stack Developer July 2022-December 2022

- Devised and maintained high-performance REST APIs in Node.js, providing real-time data access for over 500+ faculty
- Optimized backend queries and frontend JavaScript rendering, achieving a 40% reduction in page load time (3s → 1.8s)

ACADEMIC PROJECTS

FARM Stack Boilerplate (FastAPI + React + MongoDB + Docker) Los Angeles, CA
Developer August 2025-Present

- Developed a full-stack FARM boilerplate with Docker Compose, enabling seamless troubleshooting and transition from local development to production
- Implemented OAuth2-style authentication, modularized Docker services, and CI/CD hooks, reducing project setup time by 60%

Smart India Hackathon National Runner-up Ahmedabad, IN
Team Lead & Developer May 2022-July 2022

- Built a flood prediction software system using FastAPI backend, MongoDB (Motor), and React frontend styled with Tailwind and managed via React Query + Redux Toolkit
- Implemented OAuth2 to secure 100% of API routes and a normalized database schema design to manage a scalable catalog