Aastha Mahindra

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E-mail | LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

Full-stack Software Engineer with strong experience in **Node.js, React, and secure API development**. Proven background in building **scalable, cloud-ready applications**, implementing **security best practices**, Redis caching, and optimizing SQL/NoSQL databases for high-traffic systems. Experienced in collaborating with cross-functional teams, conducting code reviews, and delivering reliable services following secure coding standards and Agile methodologies.

TECHNICAL SKILLS

Programming Languages: JavaScript (Node.js), Python
Frontend: React.js, HTML5, CSS3, REST API Integration
Backend Frameworks/Libraries: Fastify, Express, Starlette
Backend Concepts: Async I/O, Caching, Rate Limiting, Connection Pooling, Microservices, System Design
Databases: MongoDB, PostgreSQL (SQL), Redis (caching)
Tools & Platforms: VS Code, Postman, Git, GitHub, CI/CD, Docker
Methodologies: Agile, Scrum, TDD (Test-Driven Development)
API Technologies: RESTful APIs, GraphQL, OpenAPI (Swagger)
Additional Keywords: Cloud Computing, Scalable Architecture, IoT, Microservices

EXPERIENCE

Ambee Datair Technology Pvt. Ltd.   July 2023 - Present
Software Engineer
- Designed and developed **secure, scalable Node.js services** using Fastify and Express for climate and geospatial platforms, handling high API traffic.
- Built **REST and GraphQL APIs** with schema validation, authentication middleware, pagination, and filtering.
- Implemented **Redis caching and geo-spatial queries** to reduce database load and improve latency.
- Optimized **PostgreSQL and MongoDB queries** with indexing and aggregation pipelines.
- Applied **async/await and non-blocking patterns** to enhance concurrency and throughput.
- Participated in **code reviews**, providing feedback focused on performance, security, and maintainability.
- Collaborated with **product, frontend, and data teams** to implement features end-to-end.
- Performed production debugging, logging analysis, and incident resolution to improve reliability.

Software Engineer Intern   Jan 2023 - June 2023
- Contributed to the development of a climate technology **Node.js SDK**, enhancing API integration and data processing pipelines using **MongoDB** and various cloud services.
- Assisted the hardware team in designing and implementing an **MQTT pipeline** for real-time data transfer to devices, ensuring low latency and high reliability.
- Participated in an Agile development environment, contributing to technical documentation and a CI/CD process.

Engineers India Ltd.   July 2022 - Aug 2022
Trainee
- Designed and implemented a full-stack web application for project management using **ReactJS** for the user interface and **Spring Boot** with **Hibernate ORM** for the backend.
- Designed REST APIs and managed relational data using **MySQL**.

Indian Space Research Organisation - ISRO   May 2021 - Oct 2021
Backend Developer Intern
- Built backend services using **Geo-Django** for an agri-focused mobile application.

PROJECTS

Ambee APIs (Node.js, Fastify, Redis, PostgreSQL, MongoDB)
- Developed and maintained **50+ REST API endpoints using Node.js and Fastify** for partner and client integrations.
- Implemented **Redis caching strategies in Node.js APIs** to reduce database load and improve response time.
- Optimized **PostgreSQL / MongoDB using indexes and query tuning** for high-volume geospatial and time-series data.
- Designed scalable API architecture with validation, pagination, and rate limiting for production traffic.

Ambee App (Node.js, Express, GraphQL, Redis, MongoDB)
- Built **GraphQL APIs on Node.js using Express** for real-time, historical, and forecast environmental datasets.
- Implemented **Redis caching in Node.js services** and optimized MongoDB aggregation queries to reduce latency.

ClimaChain — Climate Demand Forecasting (Node.js, REST APIs)
- Developed secure **REST APIs in Node.js** for climate-based demand forecasting and data aggregation workflows.
- Built **React dashboard components** to visualize forecast metrics and trends, integrating frontend with REST APIs and handling state and validations.

EDUCATION

Medi-Caps University, Indore
B. Tech in Computer Science and Engineering with specialization in Internet of Things   Aug 2019 – June 2023
CGPA: 9.15