GANESH SARAKADAM

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Full stack software engineering professional with over **4+ years** of experience building scalable, high-quality solutions that meet business needs and enhance user experience by leveraging passion for learning new technologies.

TECHNICAL SKILLS

Programming: JavaScript, Python, Java

Web Development: Angular, React, TypeScript, Vue, Redux, NgRx, HTML5, CSS3

Back End: NodeJS Express, FastAPI, Python flask, REST, GraphQL **Databases:** MySQL, PostgreSQL, Elasticsearch, MongoDB, Redis

Tools and Concepts: Docker, Kubernetes, CI/CD, Microservices, SQL, Design Patterns, NoSQL, Tomcat, Restful Web Services, AWS,

Natural language processing, Object-Oriented design, Data Analytics, Data science, Data mining, Distributed Systems

Testing: Mocha, Jasmine, Selenium, Junit, Jest, Karma, Cypress, SinonJS

Project Management: Project Planning, Task Management, MVP Creation, Scrum & Agile Methodology (Azure Board)

PROFESSIONAL EXPERIENCE

Low Altitude Weather Network, Ohio University: Athens, OH, Research Assistant

Aug 2022 - Aug 2023

• Pioneered a real-time **1TB weather data archive**, reducing retrieval times from minutes to milliseconds and enhancing API response for **10+ research** and aviation entities through automation and **caching**.

Berkadia, Platform Development Team: Hyderabad, India, Software Engineer

Mar 2021 – Aug 2022

- Delivered RESTful Web APIs using Node.js, express framework. Utilized Microservices architecture, employing an API
 Gateway to manage and coordinate the overall architecture.
- Achieved a 25% reduction in production docker image size with multi-stage builds and developed web applications
 using Angular, NodeJS, Docker, and Kubernetes.
- Spearheaded the **migration** of multiple front-end **React and** back-end **Nodejs repositories** from **JavaScript to TypeScript** across the organization.
- Built reusable UI components in Angular and React, reducing duplicate code by 65% and speeding development by 40%
- Architected and deployed GraphQL APIs using Apollo Server, seamlessly integrating with microservices. Enabled
 efficient data fetching for web clients, reducing API response times by 40%.
- Enhanced **MongoDB** and **Elasticsearch** pipelines through indexing and query optimizations, resulting in 50% faster data retrieval and 20% less server load.

Berkadia, Platform Development Team: Hyderabad, India, Associate Software Engineer

Mar 2018 – Mar 2021

- Developed features for the ticketing CRM web application as a full-stack developer, using React, Redux, Angular and MySQL. Reduced ticket submission form loading time by 50% through code optimization.
- Streamlined **real-time** CRM updates across microservices architecture using **Apache Kafka** for efficient topic organization and event flow management.
- Implemented **Redis** for 40% faster Ticket ID generation and led a team effort in migrating services and refactoring code while upgrading Angular from **v12 to v13**.
- Developed a Rule Engine using **NodeJS**, **Knex**, **Bookshelf** to optimize and streamline ticket processing operations, resulting in a remarkable 80% decrease in the time required to complete the ticket processing.

PROJECTS

Berkadia.com | Angular, Elasticsearch

• Designed and built a responsive property search web app, resulting in an 85% increase in traffic by integrating location suggestions, filters, map views, and customized Elasticsearch indexes for robust search functionality.

Ticketing Workflow | Angular, Nodejs, Kafka, Redis

 Engineered an end-to-end ticket workflow system with Redis caching for faster operations and created a reusable "@mention" Angular component to boost platform collaboration.

EDUCATION

Master of Science in Computer Science
Ohio University, Athens, OH
Bachelor of Technology in Computer Science
JNTUH, Hyderabad, India

Expected May 2024

Aug 2014 - May 2018