Ratna Prabhakar Majji

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Education

Wichita State University	Wichita, USA
Master's in Computer Science; GPA: 4.0/4.0	*January 2023 – May 2024*
V R Siddhartha Engineering College	Vijayawada, India
Bachelor of Technology – Civil Engineering, CGPA: 9.1/10.00	*August 2015 – May 2019*

Technical Skills

Programming: Java (**Oracle Certified Java Programmer**), C/C++, Python, JavaScript, TypeScript, Kotlin, HTML/CSS
Database: PostgreSQL, MongoDB, MySql, Firebase, T-SQL, Azure, AWS (**AWS Certified Cloud Practitioner**)
Development: Microservices, Spring Boot, Android Development, Express.js, Node.js, ReactJS, Material-UI, Hadoop
Dev Tools: Git, JMeter, CI/CD, Docker, Agile, SCRUM, JIRA, VS Code, IntelliJ, Eclipse, Linux
Others: Data Structures and Algorithms, Parallel Algorithms, Object Oriented Design, Design Patterns, MPI, Open MP

Experience

GE HealthCare　　　　　　　　　　　　　　　　　　　　　　　May 2023 – August 2023
Intern, Software Developer　　　　　　　　　　　　　　　　　　　　*Bellevue, WA*

- Building General Electric Healthcare (GEHC) infrastructure onto the **AWS** Cloud platform.
- Developing a converter that efficiently converts **HL7V2** messages to **FHIR** type utilizing **AWS Lambda** to ensure no data loss.
- Implementing infra as code solutions using **AWS CDK** to deploy necessary AWS services effectively for our systems.
- Implementing and overseeing the setup of a **GitLab** pipeline to automate the deployment process for all microservices and infrastructure code, resulting in an **85%** increase in deployment efficiency and enhanced developer productivity.

Tata Consultancy Services　　　　　　　　　　　　　　　　August 2020 – December 2022
Software Development Engineer　　　　　　　　　　　　　　　　　　*Bangalore, India*

- Developed scalable backend microservices with **Node.js**, **Express.js**, **TypeScript**, and **MongoDB** for the provider matchmaking system, optimizing the customer experience.
- Reduced critical **API** response times for the slot capacity service, achieving **P99** and **P95** times under **150ms** and **50ms**, respectively, down from around **350ms** and **150ms**.
- Migrated native Provider Android App screens to **React Native** using the in-house Orion framework, ensuring consistent UX across **Android** and **iOS** platforms, reducing deployment wait time by **45%**.
- Developed graph-based algorithms within slot aggregator service, utilizing **SpringBoot**, to identify single points of failure in UI-connected components. Leveraged event-driven architecture (**Kafka**) to streamline user actions, resulting in a **70%** reduction of vulnerable components.
- Engineered a dashboard for configuring provider calendar metrics at the city level, enabling informed business decisions. Integrated **Airflow** workflow to populate **1M** data points in MongoDB for the dashboard.
- Implemented the Festival Management System (FMS) feature and seamlessly integrated it into the provider **Android (Java/Kotlin)/iOS** app and backend services. This enhancement enabled accurate prediction of provider availability during festive or holiday seasons, resulting in an **85%** reduction in no-shows. This contribution significantly improved customer service and business operations.
- Automated the existing microservices deployment process by integrating services into the **CI/CD** deployment pipeline, leading to an impressive **84%** boost in deployment efficiency. Leveraged **Jenkins**, **Jira**, and **GitLab** to successfully achieve this milestone.

NCR Corporation　　　　　　　　　　　　　　　　　　　　　July 2019 – August 2020
Software Engineer　　　　　　　　　　　　　　　　　　　　　　*Hyderabad, India*

- Developed robust web applications for financial banks using **ReactJS** and **Spring Boot (Java)** to create responsive and scalable user interfaces and backend services, achieving 100% test coverage.
- Optimized response time of critical backend APIs in banking applications from **180ms** to **70ms** through API profiling and optimization, and conducted load testing using **JMeter**.
- Led a team of interns in developing an organizational hiring platform from concept to deployment, utilizing ReactJS and Spring Boot (Java). The product satisfied employee onboarding needs and delivered substantial value.

Projects

Project Enigma | *PostgreSQL, Node.js, TypeScript, ReactJs, Git*

- Designed and developed Buffalo's groundbreaking home services web app using React for frontend development and **Node.js** with **PostgreSQL** for scalable backend services and deployed it in AWS EC2. Successful campus trials impressed investors, leading to encouragement for widespread deployment. Transformed the home services industry in Wichita, optimizing convenience and efficiency for service providers and customers alike.

mPokket | *Java, Android, SQLite, Firebase, Git*

- Designed and developed an Android e-wallet app tailored for WSU students, streamlining the process of requesting funds from verified lenders following successful student verification. Implemented **MVVM** and **MVC** design patterns for optimal structure and employed **SQLite** and **Firebase** for robust data management. Deployed the application on the Google Play Store, serving a user base exceeding 5,000 students.