SINDHU KROVVIDI

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SUMMARY

Highly skilled **Software Engineer** with a Master's in Computer Science from Northeastern University and around 5 years of experience in developing high-performance, responsive web applications. Proficient with technologies React, Angular, Node, Java/Spring Boot. Experienced in architecting scalable web applications using MERN, MEAN, and Java/Spring Boot with a focus on performance and reliability. Expertise includes CI/CD workflows and AWS solutions. Committed to staying current with industry trends and continuously honing my skills to deliver exceptional software solutions.

SKILLS

Programming Languages: Java, JavaScript (including ES6+), TypeScript, Python, C#

Frontend: React, Redux, Next.js, Vue.js, Bootstrap, Tailwind CSS, Angular, HTML5, Webpack, Babel, Storybook, Sass, Figma

Backend: Node, Express, Go, Spring Boot, .NET framework, RESTful API, GraphQL, MongoDB, MySQL, PostgreSQL

Tools & Others: AWS, Docker, CI/CD, Kafka, Redis, Jenkins, JUnit, Jest, React Testing Library, Cypress, Mockito, NPM, Yarn, ESLint, Maven

WORK EXPERIENCE

Trimble Inc, Princeton, New Jersey

May 2023 – Dec 2023

Software Engineer

- Developed "Hydra", a web application, empowering users to access and modify data in the SQL database using **Angular**, **C#** and **.NET** microservices with cloud authentication and authorization through **OAuth**, **JWT** and **RBAC**
- Boosted the application with lazy loading and debouncing, increasing the throughput by 20% and reducing the page load times by 15%
- Designed and tested **RESTful API**s for a fleet management application using **Node**, leveraging **MongoDB** for NoSQL data storage, enhancing data flexibility and optimizing queries, resulting in 30% improvement in web performance
- Efficiently migrated **SQL** Server database to **PostgreSQL** using Entity Framework by developing a **Python** script, ensuring 100% data integrity and decreasing migration downtime by 50%
- Collaborated with DevOps team to deploy Node microservices using Docker on AWS EC2 and Kubernetes for container orchestration
- Automated Jenkins CI pipelines for seamless deployment across environments, enhancing operational efficiency
- Significantly improved product quality and reduced turnover time by effectively troubleshooting and resolving critical UI and backend issues within an **agile** framework

Northeastern University, Boston, Massachusetts

Sep 2022 - Apr 2023

Full Stack Developer

- Led the frontend development of "Husksheets" and "Covey. Town", collaborative applications using **React**, **Redux**, **Typescript** and enabled real-time chat through **WebSockets**
- Constructed a user interface with responsive design in **Figma**, applying web design principles that improved user satisfaction by 20%
- Assisted in API development with Spring Boot, JPA, Hibernate, Spring Security, enhancing security and efficiency
- Utilized **Maven** for build automation, managing project dependencies, compiling source code and streamlining the testing and deployment of applications and leveraged Git version control

Goodera, Bengaluru, India

Jan 2019 - Jul 2022

Software Development Engineer - Senior SDE

- Created a responsive, reusable component library having 30+ widgets using **React.js**, **TypeScript**, and **Tailwind CSS**, utilizing **Storybook** for documentation and unit tests, bringing down the development time by 10 days
- Spearheaded and deployed "Canvas", a high-performance, cross-browser compatible web application for custom dashboards with drag-and-drop using **MERN** stack, having 80% test coverage with **Jest** and **React Testing Library**

- Substantially improved website performance through react-query, optimized browser caching and Webpack configuration, reducing Largest Contentful Paint (LCP) by 70% and latency by 40%
- Maximized database performance and scalability by designing efficient schema models and indexing strategies in MongoDB, leading to a 30% reduction in query response time and refined data retrieval efficiency
- Containerized application using **Amazon ECS** and **AWS Kubernetes Service(EKS)** for container orchestration and deployed robust microservices on AWS using Docker, utilized **S3** for images and hosting static websites
- Implemented **DevOps** practices including **Docker** for containerization, **Kubernetes**, and **Jenkins**, by collaborating with DevOps and operations team to improve deployment cycles, software quality and overall productivity
- Architectured a scalable event-driven architecture utilizing Kafka which facilitated real-time data processing and
 enhanced system scalability by efficiently handling high volumes of data flow, resulting in a 20% increase in processing
 efficiency
- Owned robust back-end services in Node and Express, creating and managing REST APIs for data exchange in JSON
- Upgraded Internal tools with ReactJS, adding email scheduling and A/B testing, and implemented Test Driven
 Development (TDD) and GitHub Actions for continuous integration with 80% code coverage
- Developed CI/CD pipelines using Jenkins and deployed into different environments by creating docker images
- Engineered a Mongo "Query Builder" in Node.js with Redis caching, improving system response times by 60%
- Awarded with "Quality Award" for consistently demonstrating strong problem-solving skills, reliable application development, exceeding expectations in all core competencies, played a pivotal role in renewing 5 client contracts
- Mentored 5 team members, fostered effective communication skills by collaborating with cross-functional teams on UI/UX, technical grooming, code review, providing feedback to improve code quality, organized scrums utilizing Jira
- Built 5 web applications using HTML5, Bootstrap, JavaScript, and jQuery, improving KPI presentation for CSR initiatives

EDUCATION

Northeastern University

Boston, MA

Master of Science in Computer Science, CGPA: 3.9/4.0

Sep 2022 - Aug 2024

Coursework: Programming Design Paradigms, Cloud Computing, Data Structures and Algorithms, Web development,
 System Design, Object Oriented Programming

PROJECTS

Hospital Management System (In-progress)

Present

- Developed a robust hospital management system with efficient CRUD operations and designed an interactive analytics dashboard using **Dash** and **Plotly**, providing insightful visualizations and data analysis
- Employed Flask and SQLAlchemy for seamless backend integration and efficient data handling

AWS Cloud Infrastructure Project

Apr 2024

- Automated provisioning of AWS services (EC2, VPC, S3, RDS, Cloudwatch, LoadBalancers, Firewall) using CloudFormation templates
- Deployed web applications on AWS using Gitlab CI/CD pipeline, increased system security using IAM policies

Stack Overflow, Link Apr 2024

- Devised a Q&A platform similar to Stack Overflow utilizing **React** and **Next.js**, integrating **MongoDB**.
- Executed end-to-end testing using Cypress and deployed via Docker on AWS EC2 using Gitlab CI/CD pipelines

Stocks Investopedia, Link

Dec 2022

- Pioneered a Java application with MVC architecture enabling stock investment, dollar-cost and portfolio rebalancing
- Applied **SOLID** principles and design patterns, such as **Singleton**, **Builder** and **Factory** and achieving 75% JUnit test coverage with enhanced code robustness, error handling, and reduced post-release bugs by 30%