SINDHU KROVVIDI

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SUMMARY

Highly skilled **Full Stack 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, NodeJS, Java/Spring Boot**. Experienced in architecting scalable web applications using **MERN** and **MEAN** stacks 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, Bootstrap, Tailwind CSS, Angular, HTML5, Webpack, Babel, Storybook, Sass, Figma

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

Cloud & DevOps: AWS, Docker, Jenkins CI, GitHub Actions, Gitlab CI/CD, Kubernetes

Tools & Others: 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
Full Stack Developer

- Developed "Hydra", a web application, empowering users to access and modify data in the SQL database using **React, Typescript, NodeJS** microservices with cloud authentication and authorization through **OpenID, OAuth, JWT**
- Implemented robust state management using **Redux** and **React Redux**, optimizing application performance by 20% through effective data flow management and component reusability
- Boosted application with **react-query**, **lazy loading, pagination** and **debouncing**, reducing page load times by 15%
- Designed and tested **RESTful API**s for a fleet management application using **NodeJS,** leveraging **MongoDB** for data storage, enhancing data flexibility and optimizing queries, resulting in 30% improvement in web performance
- Collaborated with DevOps team to deploy Node microservices using **Docker** on **AWS EC2** and **Kubernetes**, automating the deployment process using **Jenkins CI/CD** pipelines, enhancing operational efficiency
- Enabled **Angular** inter component communication using **RxJs Observables** and integrated the **NgRx** state management library, managing complex data flows, state changes, and asynchronous actions
- Significantly improved product quality and reduced turnover time by 40% through troubleshooting and resolving critical UI and backend issues within the **software development life cycle** (**SDLC**) and 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**, **Hooks**, **Redux** for state management, **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%
- Engineered 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
Senior Full Stack Developer

- Created a responsive, reusable component library having 30+ widgets using **React**, **TypeScript**, and **Tailwind CSS**, utilizing **Storybook** for documentation and unit testing, bringing down the development time by 10 days
- Spearheaded "Canvas", a high-performance, cross-browser compatible web application for custom dashboards with drag-and-drop using **MERN** stack, **Javascript** having 80% unit tests 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%**
- Engineered a Mongo 'Query Builder' in **Node** with **Redis**, enhancing data retrieval and improving system response times by **60%**, demonstrating strong decision-making skills in optimizing caching strategies and query performance
- 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
- Developed robust scalable APIs in **NodeJS** and **Express**, creating and managing REST APIs for data exchange in JSON
- Developed **CI/CD** pipelines using **Jenkins** and deployed into different environments by creating **docker** images
- 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
- 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
- Architected a scalable event-driven architecture utilizing **Kafka** for real-time data processing and enhanced system scalability by efficiently handling high volumes of data flow between microservices, resulting in a **20%** increase in processing efficiency
- 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
- **Renewed 5 client contracts** by delivering fast, reliable web application development, reducing page load times by 30% through utilizing performance optimization tools and techniques, optimized queries and enhanced responsiveness
- Mentored **5** team members, fostered effective communication skills by collaborating with cross-functional teams on UI/UX, technical grooming, code review, constructive feedback to improve code quality, organized scrums utilizing Jira
- Built **5** single-page applications (SPAs) using React, 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%