

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** 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, 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

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

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, pagination** and **debouncing**, reducing the page load times by 15%
- Designed and tested **RESTful APIs** 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, automating the deployment process using **Jenkins CI** pipelines, enhancing operational efficiency
- Significantly improved product quality and reduced turnover time by troubleshooting and resolving critical UI and backend issues within the software development lifecycle (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, 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%
- 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 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.js** 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
- 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
- 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
- Developed robust scalable APIs 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
- **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, providing 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%