SINDHU KROVVIDI

Boston, MA, 02119 (Open to Relocation) • sindhukrovvidi@gmail.com • (617) 909-8576 • LinkedIn • Github • Portfolio

EDUCATION

Northeastern University Boston, MA
Master of Science in Computer Science, CGPA: 3.9/4.0 Aug 2024

SKILLS & CERTIFICATIONS

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, Spring Boot, RESTful API, GraphQL, MongoDB, MySQL, PostgreSQL
DevOps & Others : AWS, Docker, Jenkins CI, GitHub Actions, Gitlab CI/CD, Redis, Jenkins, Mocha, JUnit, Jest, React Testing Library, Cypress

WORK EXPERIENCE

Trimble Inc, Princeton, New Jersey May 2023 – Dec 2023
Software Development Engineer Co-op

- Engineered a secure web application to modify the **SQL** database leveraging **React** and **Next.js**, **Redux**, **TypeScript** and **Node** microservices eliminating the direct database credential sharing thereby enhancing security and accessibility
- Utilized **context providers** and **custom hooks** to enable dynamic rendering enhancing modularity and integration and reduced page load times by 25% through **react-query**, lazy loading, pagination and debouncing
- Integrated web applications with cloud-based authentication and authorization via **OpenId** Connect, **OAuth** and **JWT** and configured Role Based Access Control reducing authentication latency by 30%
- Optimized the internal setup for development and staging environments using **Docker** multi-stage builds, reducing image size by 80% and enhancing security in container images
- Streamlined **Jenkins CI** pipelines to accelerate deployment cycles by 50% across production environments, increasing operational efficiency
- Designed and tested **RESTful APIs** for a fleet management application using **Node** and **Javascript**, leveraging **MongoDB** for data storage, enhancing data flexibility and optimizing queries, resulting in 30% improvement in web performance
- Enhanced database performance and scalability by developing **efficient schema models** and **indexing strategies** in MongoDB, resulting in a 30% decrease in query response time and enhanced data retrieval efficiency
- Developed a **Python** script to migrate **SQL Server** database to **PostgreSQL**, resulting in reduced license costs and improved scalability ensuring 100% data integrity and decreased migration downtime by 50%

Northeastern University, Boston, Massachusetts Sep 2022 – Apr 2023
Full Stack Engineer

- Led the development of a foundational codebase, empowering students to create their own projects with **Angular, RxJS**, **Angular Signals**, **NgRx** for state management, **MaterialUI** and Bootstrap, alongside **Javascript**, **Typescript** to create a responsive and scalable UI
- Crafted API endpoints and implemented business logic using **Spring Boot**, **JPA**, **Hibernate**, and **Spring Security**, reducing response times by 40% and improving overall performance
- Revamped internal tools using **React** to streamline course scheduling, incorporated **nodemailer** in **Node** for email deadline notifications, and conducted **A/B** testing
- Implemented Test Driven Development, **Git** version control and **GitHub Actions** for continuous integration with 80% code coverage

Goodera, Bengaluru, India Jan 2019 – Jul 2022
Senior Software Development Engineer

- Created a reusable component library with over 30 widgets for a company-wide design system using **React**, **TypeScript**, and **Tailwind CSS**, and **Storybook** for documentation and testing, reducing UI development time by 10 days per project
- Spearheaded "Canvas", a high-performance, cross-browser compatible web application for custom dashboards with drag-and-drop using **MERN** stack and **Javascript** having 80% unit tests coverage with **Jest** and **React Testing Library**
- Improved website performance by implementing **react-query**, optimizing **browser caching**, and configuring **Webpack**, resulting in a 70% reduction in Largest Contentful Paint (LCP) and a 40% decrease in latency
- Engineered a Mongo 'Query Builder' in **Node** integrating with **Redis**, enhancing data retrieval and improving system response times by 60%, demonstrating strong decision-making skills in **optimizing caching strategies** and **query performance**
- Built robust **REST APIs** for Client Onboarding in **Node** and **Express**, reducing task time by 70%, along unit testing with **Mocha** and **Jest**
- Employed **Docker's Compose** feature to containerize the application and orchestrated the deployment of microservices on **AWS** using **AWS Kubernetes Service**, resulting in optimized resource utilization and increased reliability
- Collaborated with DevOps and operations team to automate deployments on **EKS** using **Jenkins**, enhancing deployment cycles, software quality, and overall productivity by 50% by efficiently troubleshooting and resolving critical UI and backend issues within an agile framework
- Mentored 5 team members, collaborated with cross-functional teams on technical grooming, code reviews and organized scrums with Jira
- Received award (Q2FY21) for consistently delivering high-quality results and contributing to project success through problem-solving skills

PROJECTS

AWS Cloud Infrastructure Project | AWS, GitHub Actions, GitLab CI/CD Apr 2024

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

Stack Overflow | Next.js, React, Node, Mongo, Cypress, Docker, GitHub Actions Jan 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 GitHub Actions CI/CD pipelines

Stocks Investopedia | Java, Object Oriented Programming, Design Patterns, JUnit Dec 2022

- Pioneered a **MVC Java** application enabling stock investments achieving 75% **JUnit** test coverage to enhance code robustness
- Applied **SOLID** principles and leveraged **Singleton**, **Builder, Strategy** and **Factory** design patterns ensuring modularity