## SINDHU KROVVIDI

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

#### **SUMMARY**

Highly skilled Software Engineer with a Master's in Computer Science from Northeastern University and over 4 years of experience in developing high-performance, responsive web applications. Proficient in front-end technologies like React, Angular and back-end frameworks like Node, 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 cloud solutions. Committed to staying current with industry trends and continuously honing my skills to deliver exceptional software solutions.

#### **WORK EXPERIENCE**

## **Trimble Inc**, Princeton, New Jersey

May 2023 - Dec 2023

## **Software Engineer Intern**

- 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 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, using 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 **Full Stack Developer**

Sep 2022 – Apr 2023

- 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, 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 interactive websites 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

#### **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

#### **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 thorough end-to-end testing using **Cypress** to ensure robust functionality, 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 averaging 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%