# Amretasre Rengarajan Thiruvengadam

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#### **EDUCATION**

#### Northeastern University, Boston, MA

Sept 2022 - May 2024

Master of Science in Information Systems

Courses: Algorithms and Data Structures, Cloud Computing, Design Patterns, Object Oriented Design

#### SRM Institute of Science and Technology, Chennai, India

July 2016 - May 2020

Bachelor of Technology in Electrical and Communications Engineering

#### TECHNICAL SKILLS

Programming Languages: JavaScript (ES6-ES2020), TypeScript, Java

Frontend: React.js, Redux, HTML5, CSS3, PostCSS, SASS, Tailwind CSS, Bootstrap, Webpack, Figma

**Backend:** Node.js, Express.js, RESTful APIs, GraphQL, OAuth, JWT

Automated Scripting Tools: NPM, Yarn, Maven

Database: MySQL, PostgreSQL, MongoDB, Redis, Elasticsearch

Infrastructure and Version Control: Git, GitHub, GitLab, Pulumi, Terraform

Testing Tools and Frameworks: Jest, Mocha, Chai, Enzyme

**Software Management:** Agile Methodology, SCRUM Methodology, Atlassian Product Suite **Cloud Systems:** EC2, RDS, DynamoDB, Lambda, IAM, VPC, Route 53, CloudWatch, VPC

### **WORK EXPERIENCE (2+ Years of Experience)**

# Software Developer, IpserLabs, Remote

Aug 2024 - Present

- Developed a scalable quiz application using React. is and Redux, improving user engagement by 40%
- Led cross-functional design collaboration to create accessible and pixel-perfect UIs aligned with brand guidelines
- Optimized application load time by 30% and ensured compliance with WCAG 2.1 accessibility standards

## Frontend Developer, New York State Office of ITS, Albany, New York

May 2023 - Aug 2023

- Digitized forms by developing dynamic features like tables and tooltips using JavaScript (ES6) and CSS3, increasing efficiency by 35%
- Built and deployed modular UI components, ensuring performance across devices and improving accessibility
- Participated in UX design discussions, improving engagement and accessibility through responsive designs
- Enhanced development workflows by creating a Node.js command-line tool for automating base project setup, expediting team onboarding

#### Full Stack Developer, Cognizant Technology Solutions, Chennai, India

Feb 2020 - July 2022

- Built reusable React.js components and implemented state management using Redux, enhancing UI performance and engagement by 10%
- Automated workflows with GitLab CI/CD, reducing deployment times by 20%, and ensured testing rigor with Jest achieving 95% coverage
- Managed source code using Git and GitLab, ensuring clean version control practices and seamless collaboration
- Integrated RESTful APIs for seamless communication, achieving a 10% improvement in data load speeds
- Designed a custom CSS grid system and implemented SASS for responsive layouts, optimizing cross-browser compatibility and load speeds
- Worked on cross-functional Agile teams, contributing to project planning, prioritization, and troubleshooting
- Resolved high-priority production issues during high-traffic events, ensuring uptime and availability through monitoring with New Relic
- Conducted code reviews, analyzing complexity and reducing duplications by 30% with SonarQube

#### **PROJECTS**

# Assignment REST API using Spring Boot: Java Spring Boot, RESTful API, JPA, MySQL

Sept 2024 - Nov 2024

- Built a MVC based RESTful API using Spring Boot for managing assignments with seamless MySQL database interactions
- Utilized JPA and Hibernate ORM for seamless database interactions, optimizing query performance through object-relational mapping

## Assignment Management API using Node.js: AWS, GitHub Actions, MySQL, Node.js, Postman, RESTful API

Sept 2023 - Nov 2023

- Designed a cloud-based system using AWS Lambda and Node.js, ensuring high availability and performance
- Implemented IAM-based access control and serverless processing for secure, efficient operations
- · Automated deployments with GitHub Actions, reducing time-to-market and integrated performance monitoring with CloudWatch
- · Conducted performance and load testing using Postman to validate system reliability under varying workloads

## Secure API for Insurance Services: Redis (NoSQL), Node.js, Postman, Elasticsearch, RESTful API

Sept 2023 - Nov 2023

- Developed a scalable, secure API for insurance services using Node is and Redis, integrating OAuth 2.0 for robust authentication
- Leveraged RabbitMQ for asynchronous processing ensuring scalability, fault tolerance
- Indexed insurance records with Elasticsearch, improving search query performance by 40%

### **Travelling Salesman Problem:** Java, Optimization (2 opt, 3 opt)

Jan 2023 - Apr 2023

• Optimized route calculations using advanced algorithms and data structures, improving computation speed by

## **Grocery Recommendation Database:** MySQL, Python, Jupiter Notebook

Sept 2022 - Dec 2022

• Designed a MySOL database with Tweet scraping, leveraging SOL for data analysis and Pyplot for visualization