

CHINNASURYA PRASAD VULAVALA

+1 (857) 351-9241 | vulavala.c@northeastern.edu | <https://www.linkedin.com/in/chinnasurya-prasad-vulavala-119b5816b/>

EDUCATION

Northeastern University

Master of Science in Computer Software Engineering

Boston, MA

Expected May 2026

National Institute of Technology Raipur

Bachelors in Electronics and Telecommunication Engineering

Raipur, India

May 2022

TECHNICAL SKILLS

Programming Languages: Java, C++, Python, SQL, JavaScript, TypeScript

Web Technologies: ReactJS, Next.js, NestJS, CSS, Spring Boot, Node.js, REST, GraphQL, Angular, Bootstrap, Jest, Jasmine, Karma, Cypress

Databases: RDBMS(MySQL, PostgreSQL), NoSQL(MongoDB)

Tools: Git, Jira, Rally, VSCode, IntelliJ, Postman, JMeter, NeoLoad, SonarQube, Figma

CI/CD Tools: Github Actions, Jenkins

Cloud Technologies: AWS S3, AWS Lambda, AWS EC2, AWS Aurora, AWS Cloud-Watch, GCP, Packer, Terraform

Other: Object Oriented Design, Data Structures and Algorithms, Machine Learning, Maven, Spring, Operating systems, Network Structures and Cloud Computing, Linux, Distributed Systems, Microservices, Design Patterns

EXPERIENCE

Software Engineer

Optum Global Solutions(United Health Group)

August 2022 – July 2024

Hyderabad, India

- Developed a responsive web application leveraging Angular, Netra Library, NestJS, and GraphQL, enhancing the experience for 500,000+ users.
- Launched the Message Center microproduct, integrating 10+ backend APIs into an Outlook-style interface, optimizing user communication workflows.
- Engineered robust unit testing frameworks with Jasmine and Jest, achieving 85% test coverage and reducing defects by 40%, while resolving 300+ critical code issues using SonarQube.
- Administered GraphQL APIs via Hasura console, optimizing database queries, defining role-based permissions, and enhancing API response efficiency by 20%.
- Conducted rigorous load and performance testing utilizing NeoLoad and Blue Jay, ensuring seamless functionality and stability for 5,000+ concurrent users.

PROJECTS

Cloud Native Web Application

- Configured network infrastructure on Amazon AWS using Terraform, including VPCs, subnets, DNS zones, and firewall rules.
- Implemented load balancers, auto-scalers and auto-healing policies to ensure high availability and maximum uptime.
- Designed and deployed a CI/CD pipeline using GitHub Actions, automating unit testing.

Movie Booking Management System

- Developed a Movie Management Platform using Spring Boot and React, allowing users to register, log in, browse movies, and book seats, with maintainable architecture following SOLID principles.
- Implemented JWT-based authentication and role-based access control for users, admins, and theater owners; designed a normalized MySQL schema for efficient data management.
- Applied key Design Patterns such as Repository, Singleton, and Factory to ensure clean code abstraction, resource control, and scalable object creation across the system.

International Student Accommodation Portal

- Developed RESTful APIs using Express.js and MongoDB to manage user profiles, property listings, and chat data, ensuring efficient data handling and retrieval.
- Built an interactive and responsive frontend with React and TypeScript, incorporating real-time updates and seamless navigation for an enhanced user experience.
- Optimized state management with Redux and integrated real-time communication using WebSockets, enabling instant user interaction while minimizing unnecessary re-renders.