MAMATHA IRUVARAM

Open to Relocation | Fairfax, VA | +1 (571)604-2697 | Email: miruvaram@gmail.com | GitHub | LinkedIn | Portfolio

EDUCATION

George Mason University,
*Master of Science in **Information Systems; GPA: 3.90/4.0***   *Aug 2023 - May 2025*

Jawaharlal Nehru Technological University,
*Bachelor of Technology in **Computer Science Engineering***   *July 2017 - Jun 2021*

TECHNICAL SKILLS/TOOLS

Programming Languages	: Java, JavaScript, TypeScript, C, C++, Python
Frameworks/Libraries	: Spring Boot, Node.js, Express.js, JSP, Servlets
Frontend	: React.js, Redux, Angular, HTML5, CSS3, Bootstrap, Tailwind CSS, React Router
Databases	: Oracle SQL, MySQL, PostgreSQL, MongoDB, JDBC
Authentication & Security	: JWT, bcrypt
DevOps & Tools	: Jenkins, Git, GitHub, Jira, Maven
Cloud/Deployment	: AWS EC2, AWS S3, Azure App Service
Other	: Socket.IO, RESTful APIs, GraphQL

WORK EXPERIENCE

Cognizant Technological Solutions   *Dec 2021 - Jul 2023*
Software Engineer

- Developed and maintained **RESTful APIs** using **Java** and **Spring Boot** and **Maven** supporting **5,000+** daily users and increasing system efficiency by **30%** through backend optimization.
- Built interactive, responsive UI components with **React.js, JavaScript** and **Typescript** leading to **a 20% increase** in user engagement and positive stakeholder feedback
- Optimized database queries and schemas in **MySQL** and **PostgreSQL**, accelerating data retrieval by **25%** and enabling seamless scaling for larger datasets.
- Utilized **Jenkins** for **CI/CD automation** and **Postman** for **API testing**, streamlining the build, deployment, and validation process across environments.
- Tracked issues and managed sprints in **Jira**, contributing to timely project delivery and effective Agile collaboration.
- Delivered multiple product releases in **Agile** teams by leading code reviews and onboarding **2+ junior developers**, reducing post-release defects and boosting team productivity.

PROJECT EXPERIENCE

Student Survey Application | Github

- Built a comprehensive survey platform using **Angular**, **Node.js**, **Spring Boot**, and **MySQL**, allowing users to submit, update, and delete over **500** survey forms through an intuitive interface.
- Integrated **RESTful APIs** with **Spring Boot** and managed persistent survey data in **MySQL**, enabling seamless **CRUD** operations and supporting **50+ concurrent users** during testing.
- Deployed on **AWS EC2** and **S3 buckets**, achieving **99.9%** uptime and fast response times (<500ms) for a smooth user experience.

Loyalty Program Management System | Github

- Architected a 3-tier loyalty platform using **Java Servlets**, **JSP**, and **Android Studio**, enabling customers to log in, track points, and redeem rewards through a seamless mobile and web interface.
- Integrated secure authentication, real-time prize redemption, and transaction history by connecting **Android**, **Java**, and **JDBC** with **Oracle SQL** and databases on **Apache Tomcat**, manually created large customer data sets for thorough testing.
- Optimized complex **SQL** queries and backend logic to efficiently manage and retrieve data, supporting **1,000+ users** and ensuring reliable performance across the application.

Collaborative Task Manager | Github

- Developed a **full-stack** task manager with **React**, **Node.js**, **Express.js,** and **PostgreSQL**, enabling secure creation, update, and management of **100+ tasks** across a responsive UI.
- Implemented **JWT** authentication and **bcrypt** password hashing, protecting user accounts and supporting secure logins for up to **50** simulated users during testing.
- Optimized **REST API** endpoints and **PostgreSQL** queries using **raw SQL**, achieving sub-second response times for all **CRUD** operations and exploring **GraphQL** for future scalability.

Connectly – Real Time chat Application | Github

- Built a group chat platform with **React**, **Tailwind CSS**, and **Framer Motion**, enabling users to join themed chat rooms and improving user engagement with an intuitive, responsive interface.
- Implemented secure authentication and role-based access using **Node.js**, **Express.js**, **MongoDB**, and **JWT**, which allowed protected creation of public/private rooms and ensured only authorized member participation.
- Enabled seamless real-time communication with **Socket.IO,** supporting instant messaging, emoji reactions, and live updates enhancing collaboration and user satisfaction.