

Keerthi Reddy Ellanki

+14709297757 | keerthireddyellanki303@gmail.com | [linkedin.com/in/keerthi-reddy-ellanki/](https://www.linkedin.com/in/keerthi-reddy-ellanki/) | github.com/KeerthiEllanki/

SUMMARY

Results-driven software engineer with expertise in frontend and backend development, specializing in Java, React, Angular and cloud technologies like AWS. Experienced in building scalable, responsive web applications and optimizing microservices for high-performance systems. Passionate about software architecture, cloud infrastructure, and enhancing user experiences through efficient design and development.

CORE COMPETENCIES

Programming Languages: Java, Python, JavaScript, Typescript, SQL, Tailwind CSS, HTML, CSS.

Frameworks: Spring Boot, Angular, React, Node.js.

Cloud: Amazon ECS, Route 53, CloudWatch, CloudFormation, EC2 Auto-Scaling, Azure DevOps, Azure SQL

Tools: STS, VS Code, Apache JMeter, Postman, MySQL, App Dynamics, Docker, Jupyter, Splunk, Figma, Power Automate, Git, Jira, MS Office.

Concepts: CI/CD, Object-Oriented Programming, Software Development Life Cycle, REST APIs, Maven, HTTP.

Certifications: Microsoft Azure Fundamentals: AZ-900.

PROFESSIONAL EXPERIENCE

BilliMD | Frontend Developer

Feb 2025 – Present

- Engineered and launched key marketing pages for a Medical Credentialing Service Provider, using **React, TypeScript & Tailwind CSS**, enhancing user engagement and streamlining information accessibility.
- Enhanced front-end performance with **lazy loading** and **state management**, cutting page load times by 45%.
- Engineered a fully responsive design using **Tailwind CSS**, ensuring adaptability across devices, boosting accessibility & mobile engagement by 30%.

Vanguard | Software Engineer - Backend

Oct 2022 - Aug 2023

- Developed and maintained 15+ scalable microservices using **Java Spring Boot**, for a retirement readiness platform, serving over 1M+ users.
- Designed and implemented **RESTful APIs**, focusing on CRUD operations, XML/JSON payload optimization, efficient data handling, pagination, and error handling, improving API integration efficiency.
- Integrated **OAuth2.0** authorization across microservices, reducing unauthorized access attempts by 50%.
- Conducted comprehensive tests using **Junit** for unit-level testing and **Postman** for API-level testing, reducing production bugs by half.
- Led a team of 6 junior developers, mentoring them on **Java** best practices; fostering collaboration & enhancing team proficiency.

Vanguard | Associate Software Engineer - Cloud

Aug 2021 - Sep 2022

- Supervised the migration of backend microservices from PCF to **AWS ECS**, enhancing scalability & reducing operational costs.
- Implemented **multi-region architecture** on AWS, ensuring high availability and disaster recovery capabilities.
- Leveraged Amazon **Route 53** for intelligent traffic routing between regions, optimizing performance & reducing latency.
- Configured automated monitoring and alerting systems using **EC2 Auto-Scaling**, **Cloud Watch**, and **Cloud Formation**, reducing mean time to detect (MTTD) issues by 50%.
- Built and optimized robust **CI/CD** pipelines by integrating **Docker** to containerize applications and using **Atlassian suite** (Bitbucket, Bamboo, Jira) with **Git** to automate build, test, and deployment processes, shortening release cycles from 5 weeks to 3 weeks.

Tech Mahindra | Software Engineer - Full Stack

Aug 2020 - Jul 2021

- Developed 25+ **Angular**-based frontend components for employee self-service portal, streamlining workflows & reducing HR inquiries.
- Implemented client-side form validations using **JavaScript**, decreasing invalid submissions by 60% and improving overall user experience.
- Designed & optimized **SQL** queries for a MySQL database, improving report generation speed from minutes to seconds.
- Implemented a **Python** script utilizing the smtplib library to automate personalized email notifications for compliance training deadlines, increasing on-time completion rates.
- Collaborated with senior developers and product owners to analyze the project requirements and translate them into actionable user stories in an **Agile** environment, consistently delivering 90% of sprint commitments.

PERSONAL PROJECTS

Crave Express: A food delivery mobile application developed using **Flutter - Dart** (single codebase for android, ios & web), allowing users to order dishes from local restaurants. Integrated **Firebase** including authentication, cloud messaging, & Fire store for data storage. Incorporated real-time tracking of delivery using **Flutter Google Maps**.

Route Optimizer: Developed a machine learning model for optimizing route planning in transportation systems, leveraging **Python**, **scikit-learn**, and real-time data from **Google Maps API**. Implemented supervised learning techniques to predict the most efficient routes based on distance, time, and constraints, resulting in a significant reduction in delivery time and costs.

VOLUNTEER EXPERIENCE

TRiO SSS: Mentored and assisted underrepresented students (first-generation, low-income, disabled) in STEM fields, providing academic support and organizing workshops on study skills and career preparation to enhance retention and graduation rates.

Girls Who Code at GSU: Contributed to women's safety project by participating in 2023 HACKHERS hackathon focused on women in tech.

EDUCATION

Georgia State University

Aug 2023 – May/Dec 2025

Master of Science in Computer Science

GPA: 4.21/ 4.3

- Courses:** Data Structures and Algorithms, Web Development, Mobile Application Development, Database Management Systems, Software Engineering, Operating Systems, Computer Networks, Python Programming, Artificial Intelligence (AI), Cloud Computing, Data Mining.