

# Kumar Swamy Mettela

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## SUMMARY

Innovative with an eye for detail programmer boasting 3+ years of experience in Full-stack development, showcasing exceptional skills in programming languages and frameworks, with a record of enhancing performance and productivity of various projects.

## EDUCATION

### Master of Science - Computer Science

Arizona State University - Tempe, Arizona, USA

May 2023

GPA: 3.9/4

### Bachelor of Engineering - Electrical and Electronics

Anna University - Chennai, India

May 2019

GPA: 8.7/10

## RELEVANT COURSEWORK

Data Structures, Software Methodology, OO Programming, Algorithms Analysis, Advance Database Management, System Design, Data Visualization, Software Security, Mobile Computing, Product Management, Embedded Programming, Circuit Design.

## EXPERIENCE

### Developer - EdPlus at Arizona State University

March 2022 - March 2023

- Experienced software engineer with expertise in Kotlin, Java, C#, .Net framework, C++, MATLAB, and AWS. Led and collaborated with cross-functional teams to engineer innovative solutions resulting in increased user engagement, revenue, and productivity. Implemented rigorous testing procedures, resulting in bug-free code & reduced post-deployment issues.
- Experienced in data processing, ETL pipelines, and storage solutions, resulting in significant cost savings and improved decision-making. Proficient in CI/CD pipelines, Jenkins, GitLab, AWS Code Pipeline, Kubernetes, CloudFormation, and Terraform. Mentored junior developers and conducted code reviews, resolving critical issues & improving system uptime.

### Software Engineer - Cognizant Technology Solutions

July 2019 - August 2021

**Technologies:** Java, AWS (Lambda, SQS, API Gateway, DynamoDB, IAM), REST API, Spring Boot

- Customized in CARMA platform to facilitate users of an interface be onboarded utilizing backend modules (endpoints) and JWT tokens, IAM authentication to connect with (Java) Micro-services, improving its action's reaction time by 16%.
- Adapted code to aid MVC pattern of Spring framework in devising API modules with AWS Lambda, API Gateway, and SQS exercising CI/CD integration techniques, test-driven development increasing productivity and scalability by 45%.
- Administered SQL queries in CQRS event-driven pattern of DynamoDB, integrating Micro-services applying RESTful API to avoid inefficient memory joins, moderate overloading of product by 86%, and ensuring high security write queries.
- Processed API call with POSTMAN from JSON/XML files, involved in 3+ Software Development Life Cycle (SDLC) phases of project exploiting JIRA, Kanban, Scrum, and Agile methodologies resulting 20% mitigation in bug reports.

## CERTIFICATIONS

- Brainstormed and accomplished Amazon Web Services (AWS) Developer - Associate Certification [\[Link\]](#).
- Excelled in Agile Virtual Experience Program provided by J.P. Morgan Chase & Co via Forage platform [\[Link\]](#).
- Completed Goldman Sachs Software Engineering Virtual Experience Program on Forage platform [\[Link\]](#).
- Qualified professional honed hands-on skills in Data Science and Machine Learning from IBM Watson Studio [\[Link\]](#).

## PROJECTS

### Secure Hospital Management System | Java, Python, Spring Boot, AngularJS, JavaScript, Node.js, MySQL, Hyperledger

- Achieved 85% minimization in cognitive load by developing AngularJS UI dashboard, optimized SDLC with CI/CD, TDD for 96% reliability, secured with Hyperledger Fabric, and reduced retrieval time with REST API calls.

### ASL Fingerspelling | Android, Kotlin, Python, POSENET, CNN, Pandas, Scikit-learn, Keras, OpenCV, TensorFlow

- Developed an Android app with 90% accuracy using POSENET and ML models to predict letters and words, added GNN algorithm for 27% improvement in retrieval efficiency and 40% precision increase in long sentences.

### Geo-Spatial Hotspot Detection | Python, Scala, Spark, PostGIS, ArcGIS, PostgreSQL, Apache Sedona, MapReduce

- Led team of 4 to develop parallel spatial join using PostGIS & Sedona, prompting in 30% query performance earned & 50% reduction in database load time, added closure point feature obtaining correctness by 40% & peer satisfaction by 20%.

### Smart Irrigation System with Weather Monitoring | Verilog (FPGA), Embedded C, Arduino, Python, Raspberry Pi, TCP/IP

- Forecasted FPGA-based smart irrigation system with real-time weather and soil monitoring, reducing water consumption by 30%, projected yield and net profit by 25%, designed Python UI, targeting usability by 80%.

## TECHNICAL SKILLS

**Languages:** C++, Java, Python, JavaScript, SQL, PL/SQL, Go, Embedded C, Verilog, MATLAB, VHDL, Arduino, Simulink

**Databases and OS:** MySQL, Postgres SQL, DynamoDB, MongoDB, Windows, Linux

**Framework:** Spring Boot, Bootstrap, AngularJS, Node.js, Vue.js, React, HTML, CSS, Django, Mockito, JUnit

**Cloud:** Amazon Web Services (AWS - Lambda, SQS, API Gateway, DynamoDB, IAM), Kubernetes, Docker

**Software Development:** Agile, Scrum, JIRA, Kanban, CI/CD, TDD, GIT Version Control

**Other:** Salesforce, Postman, Jenkins, Confluence, JWT, JSP, XML, JSON, Apache Tomcat, TCP/IP

## LEADERSHIP EXPERIENCE

- Mentored and hosted service-oriented discussions for 146 students as Graduate Service Assistant for Mobile Computing.
- Strategized 10+ analysis reports, optimized website performance to design database systems efficiently as Technologist.