

# SATIYA PRAGAASH RANGANATHAN MANIVANNAN

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## SUMMARY

- Full-stack developer with experience in building microservices-based applications using React, Node.js and AWS. Skilled in REST APIs and automation testing with a strong focus on scalability, automation, and Agile scrum delivery.
- Enthusiastic collaborator with effective communication skills, problem-solving abilities, and results-oriented mindset, with an ability to translate technical analysis into impactful recommendations for cross-functional stakeholders.

## SKILLS

**Programming Languages:** Java, JavaScript, Python, TypeScript, HTML, CSS, SQL.

**Frameworks:** Django, Flask, Spring Boot, NodeJS, jQuery, ReactJS, VueJS, Tailwind CSS.

**Database Management:** RDBMS (MySQL, PostgreSQL, Aurora), NoSQL (Elasticsearch, MongoDB, Redis)

**Methodologies:** Object-Oriented Design, Agile/Scrum, TDD.

**DevOps:** Git, GitHub, GitHub Actions, Apache Kafka, CI/CD, Docker, Kubernetes (GKE), IaC - Terraform.

**Tools and Testing:** Selenium, JIRA, Jest, JUnit

**Cloud:** AWS (EC2, Elastic Beanstalk, S3, Lambda, Route53, Security Groups, IAM roles, Cloudwatch), Azure.

## PROFESSIONAL EXPERIENCE

### AI Software Developer Intern

e24 Technologies

Chennai, India

Oct 2023 - Jan 2024

- Optimized speech-to-text models using NLP, improving accuracy by **10%** while maintaining quality standards.
- Integrated models into production-ready applications using **REST APIs** and **Git**.
- Documented technical processes using **Microsoft Office** and designed workflows with **UML** diagrams
- Built context-aware query systems using **LangChain**, which improved relevance by **20%**.

## PROJECTS

### VS Code Refactoring Plugin (TypeScript, Jest, JUnit, Axios)

Nov 2024

- VS Code extension with AI-powered **RESTful APIs** to suggest intelligent identifier renaming for JavaScript files.
- Wrote comprehensive **unit tests** to validate API responses and UI interactions, ensuring 100% functionality coverage and improving extension reliability.
- Successfully completed and published the plugin on **VS Code Marketplace** delivering **100%** functionality.

### MindMuse AI - A Mental Health and Wellbeing Guide (NodeJS, ReactJS, DynamoDB)

Jan 2025

- Deployed a cloud-native web application using **AWS** services including Lambda (fully serverless back-end), API Gateway, DynamoDB, and S3 to deliver a serverless architecture.
- Automated **100%** of infrastructure provisioning with **Terraform**, making deployment time **<5 mins**.

### Urban Assist - Microservices-Based Service Booking Application (Java, SpringBoot, MySQL)

Feb 2025

- Built a cloud-native **microservices architecture** deployed on GKE with Terraform, ensuring **99.9%** uptime and multi-zone high availability across production environments.
- Integrated **RabbitMQ** for event-driven communication and API Gateway for service routing, following clean architecture and **SDLC** best practices with the team.
- Automated the deployment** of 10+ services using Docker, streamlining CI/CD pipelines and reducing manual effort by **90%**.

### Bio-Bert and LLaMA 2 13B Analytical Model in Healthcare Applications (Python, Flask)

Oct 2023

- Developed an advanced AI-powered medical chatbot leveraging **LLaMA 2 13B** to enhance diagnostic accuracy and user interaction in medical consultations.
- Implemented multilingual support using Google Translate API.

## EDUCATION

### Dalhousie University

Master of Applied Computer Science | 3.9/4.3

Halifax, Canada

Sept 2024 - Present

**Relevant Coursework:** Adv. Topics in Web Development and Software Development, Data Warehousing.

### SRM Institute of Science and Technology

Bachelor of Technology in Computer Science (spl. in AI & ML), | 8.95/10

Chennai, India

Oct 2020 - May 2024

## CERTIFICATIONS

AWS Cloud Practitioner

May 2025

Machine Learning Specialization by Stanford University & DeepLearning.AI

Dec 2023

AWS AIML - AICTE Virtual Internship

Nov 2023