

Vijay Murugan Appavu Sivaprakasam

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EDUCATION

Master of Science (M.S.) in Artificial Intelligence

Aug 2025 – Dec 2026

Texas A & M University – College Station

Relevant Coursework: AI Security, Computer Vision Foundation Models, Machine Learning

Bachelor of Technology (B.Tech.) in Computer Science

Aug 2019 – May 2023

PES University (GPA: 8.7/10)

Relevant Coursework: Data Structures and Algorithms, Machine Intelligence, Deep Learning, Object-Oriented Programming

SKILLS

Programming Languages: Java, Python, C, SQL, HTML/CSS, JavaScript, TypeScript

Frameworks and Databases: Spring Boot, Spring, Flask, Fast API, DynamoDB, Oracle DB, MongoDB, MySQL, PostgreSQL

Tools: AWS Lambda, AWS S3, Docker, Kubernetes, REST, Git, Postman, GitHub Actions, CI/CD, Jaspersoft Studio, Jenkins, Junit, MCP, Linux/Unix, MVC, Maven, Rest API, Bitbucket, CloudFormation, jQuery, JWT, Firebase, Splunk, Sumo Logic

Other: Team Leadership, Communication, Scrum, Agile, Project Management, Kanban, Mentorship

EXPERIENCE

GoTo

Jun 2023 – Aug 2025

Software Development Engineer

Bangalore, India

- **Java Expertise** – Led the development of a payment feature using **Java** and **Spring Boot** that recovered 70% of failed payments for a 5% revenue uplift which enabled partial payments for an additional **3%** revenue surge
- **Software Architecture** – Migrated 2M+ records from MySQL to DynamoDB using a multithreaded Spring Boot job. Orchestrated payment APIs to consolidate collections and reduced user duplication 30% through unified tenant management
- **Authorization and API Security** – Implemented OAuth 2.0 token validation across all APIs with internal SDKs and ensured secure and consistent access control for 5,000+ daily users. Enforced role-based access to block unauthorized requests
- **AI Platform** – Developed and implemented a customer-retention strategy that analyzed user behavior patterns to identify lapsed customers, resulting in a 30% increase in retention rates across all product lines
- **Fraud Prevention Solutions** – Designed an address verification mechanism that reduced fraudulent activities and manual review processes by 10% while maintaining 98% accuracy
- **Support** – Provided on-call support and live debugging for critical, customer-facing transaction issues, resolving over **20** tickets weekly and contributing to a **15% reduction** in recurring events
- **Payment Integration** – Integrated PAX8 Marketplace and NetSuite gateways. Automated invoice-reconciliation workflows to match payments with vendor invoices and contributed to a 5% increase in overall sales revenue

GoTo

Jan 2023 – Jun 2023

Software Development Engineering Intern

Bangalore, India

- **Microservices** – Spearheaded a scalable **Fast API** address validation microservice for **10+** internal systems, achieving **98%** accuracy and supporting multiple user addresses for approximately **1,000** daily users
- **Observability & Monitoring** – Configured **15+** real-time monitoring dashboards across **Splunk** and **Sumo Logic** platforms with automated alert configurations to track error logs, and revenue metrics, reducing incident response time by **40%**
- **CI/CD and DevOps** – Deployed over **10** microservices using **Docker** containers through **CI/CD Jenkins** pipelines, accelerating release cycles by 30% enhancing recovery workflows, resulting in a reduction of 10% downtime

PATENTS & PUBLICATIONS

Government of **India Patent** Certificate - Smart Shopping Trolley - Indian Patent Number: 555691 (Java, Python, ML, IoT) | [GitHub](#)

Title: **Automated Shopping Cart:** Reducing Long Queues One Cart at a Time - International Conference on Smart Data Intelligence

- Engineered a smart shopping cart leveraging Arduino load cells for real-time weight detection with **98%** precision and an ML-powered Android app in **Java**. Classified 80+ grocery items using **EfficientNetV2** and **MobileNetV2** models with **95%+** accuracy

PROJECTS

Company Logo Search & Flowchart Builder – React.js, MongoDB, Firebase, NGINX | [GitHub](#)

- Engineered a scalable **React.js** application with Firebase authentication serving **250+ users** at **99%** reliability, integrating **Google Favicon API**, MongoDB storage, and canvas-based development tools to build flow-charts with company logos

Smart Movie Recommendation (Python, Fast API, ML, TypeScript, Firebase) | [GitHub](#)

- Built a personalized movie recommendation system by training a hybrid ML model combining **K-means** and **cosine similarity**
- Deployed with **Fast API** backend, **TypeScript** frontend, and **Firebase** authentication to deliver over 90% accurate suggestions