

# Vijay Murugan Appavu Sivaprakasam

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## EDUCATION

<b>Master of Science (M.S.) in Artificial Intelligence</b> Texas A & M University – College Station Relevant Coursework: AI Security, Computer Vision Foundation Models, Machine Learning	Aug 2025 – Dec 2026
<b>Bachelor of Technology (B.Tech.) in Computer Science</b> PES University (GPA: 8.7/10) Relevant Coursework: Data Structures and Algorithms, Machine Intelligence, Deep Learning, Object-Oriented Programming	Aug 2019 – May 2023

## SKILLS

<b>Programming Languages:</b> Java, Python, C, SQL, HTML/CSS, JavaScript, TypeScript
<b>Frameworks and Databases:</b> Spring Boot, Spring, Flask, Fast API, DynamoDB, Oracle DB, MongoDB, MySQL, PostgreSQL
<b>Tools:</b> 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
<b>Other:</b> Team Leadership, Communication, Scrum, Agile, Project Management, Kanban, Mentorship

## EXPERIENCE

<b>GoTo</b> <b>Software Development Engineer</b>	Jun 2023 – Aug 2025
• <b>Java Expertise</b> – Led the development of a payment feature using <b>Java</b> and <b>Spring Boot</b> that recovered 70% of failed payments for a 5% revenue uplift which enabled partial payments for an additional <b>3%</b> revenue surge	Bangalore, India
• <b>Software Architecture</b> – 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	
• <b>Authorization and API Security</b> – 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	
• <b>AI Platform</b> – 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	
• <b>Fraud Prevention Solutions</b> – Designed an address verification mechanism that reduced fraudulent activities and manual review processes by 10% while maintaining 98% accuracy	
• <b>Support</b> – Provided on-call support and live debugging for critical, customer-facing transaction issues, resolving over <b>20</b> tickets weekly and contributing to a <b>15% reduction</b> in recurring events	
• <b>Payment Integration</b> – Integrated PAX8 Marketplace and NetSuite gateways. Automated invoice-reconciliation workflows to match payments with vendor invoices and contributed to a <b>5%</b> increase in overall sales revenue	
<b>GoTo</b> <b>Software Development Engineering Intern</b>	Jan 2023 – Jun 2023
• <b>Microservices</b> – Spearheaded a scalable <b>Fast API</b> address validation microservice for <b>10+</b> internal systems, achieving <b>98%</b> accuracy and supporting multiple user addresses for approximately <b>1,000</b> daily users	Bangalore, India
• <b>Observability &amp; Monitoring</b> – Configured <b>15+</b> real-time monitoring dashboards across <b>Splunk</b> and <b>Sumo Logic</b> platforms with automated alert configurations to track error logs, and revenue metrics, reducing incident response time by <b>40%</b>	
• <b>CI/CD and DevOps</b> – Deployed over <b>10</b> microservices using <b>Docker</b> containers through <b>CI/CD Jenkins</b> 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)   <a href="#">GitHub</a>
Title: <b>Automated Shopping Cart</b> : 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 <b>98%</b> precision and an ML-powered Android app in <b>Java</b> . Classified 80+ grocery items using <b>EfficientNetV2</b> and <b>MobileNetV2</b> models with <b>95%+</b> accuracy

## PROJECTS

<b>Company Logo Search &amp; Flowchart Builder</b> – React.js, MongoDB, Firebase, NGINX   <a href="#">GitHub</a>
• Engineered a scalable <b>React.js</b> application with Firebase authentication serving <b>250+ users</b> at <b>99%</b> reliability, integrating <b>Google Favicon API</b> , MongoDB storage, and canvas-based development tools to build flow-charts with company logos
<b>Smart Movie Recommendation</b> (Python, Fast API, ML, TypeScript, Firebase)   <a href="#">GitHub</a>
• Built a personalized movie recommendation system by training a hybrid ML model combining <b>K-means</b> and <b>cosine similarity</b>
• Deployed with <b>Fast API</b> backend, <b>TypeScript</b> frontend, and <b>Firebase</b> authentication to deliver over 90% accurate suggestions