

Shunmugavel Mariappan

Director of Engineering — Applied AI · Enterprise SaaS · Cloud Platforms

Chennai, India · Open to Bengaluru / Hyderabad / Pune · Open to relocation

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EXECUTIVE SUMMARY

Engineering leader with 19 years building and scaling SaaS platforms and the organizations behind them. Shipped a production ML scheduling system for **20,000+ field technicians at Verizon** — years before AI was a boardroom priority — then scaled a Trimble cloud platform team **6× (5 → 30 engineers)** while adding **\$28M in net-new ARR**. Most recently launched a **Build-to-Order AI business from 0→1** — **5 paying enterprise customers at 40% operating income** — delivering custom AI solutions as a new high-margin revenue line. Known for turning customer commitments into shipped product, retaining top talent (**92%**), and embedding AI into how teams build, not just what they build. Looking to lead a software engineering organization for an enterprise SaaS business operating at scale.

IMPACT AT A GLANCE

+\$28M NET-NEW ARR ADDED	40% OPERATING INCOME (AI BTO)	6× ORG GROWTH (5→30 ENG)	92% TALENT RETENTION	20,000+ TECHNICIANS AI-AUTOMATED
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CORE LEADERSHIP COMPETENCIES

Engineering Org Scaling & Leadership · 0→1 Product & Platform Delivery · Applied AI / ML in Production · P&L & ARR Partnership · Multi-Cloud Architecture (AWS · Azure · GCP, certified) · Talent Development & Retention · Executive & Cross-Functional Stakeholder Management · AI-Driven Engineering Productivity · Enterprise SaaS Strategy

EXPERIENCE

Engineering Director — Applied AI, Cloud Platform & Transportation SaaS

Oct 2018 – Present

Trimble Inc. · Chennai, India

\$5B-revenue global enterprise SaaS leader (construction, transportation, agriculture), 150+ countries

Scope: Lead a **30-engineer organization** through 2 engineering managers and 3 staff engineers (and their teams); partner on the **\$50M ARR P&L** with Product and Business; report to the Sr. Director & Global VP of Engineering.

- **Launched a Build-to-Order AI business 0→1** — authored the business model and partnered with Sales on go-to-market to deliver custom AI solutions, **landing 5 paying enterprise customers at 40% operating income** and establishing a new high-margin revenue line within the Applied AI portfolio.
- **Drove \$28M in net-new ARR (\$22M → \$50M)** by launching **two new product lines** in transportation & supply chain and expanding enterprise adoption of the Forestry Industry Cloud — partnering directly with Product and Business as a P&L co-owner.
- **Built the Forestry Industry Cloud from zero to cross-org adoption** across four product lines — defining API standards, multi-tenant architecture, and automated data workflows designed for AI/agentive readiness.
- **Scaled the org 6× (5 → 30 engineers) with 92% retention** using a single-threaded ownership model where each product area is owned end-to-end by an accountable team.
- **Improved delivery velocity 40%** by embedding AI-assisted engineering into the standard sprint cadence — adoption across the org, not a side initiative.
- **Cut release cycle time 25%** through platform modernization and CI/CD / DevSecOps investment.
- Represented engineering on the **India Engineering Council (500+ engineers)** and drove org-wide standards for architecture, AI adoption, and developer experience.

Technical Manager — AI/ML & Dispatch Automation

Dec 2006 – Oct 2018

Verizon · Chennai, India

Fortune 500 #13 · \$134B revenue · largest US telecom

- **Built and shipped a production ML dispatch system optimizing 20,000+ field technicians and 50,000 daily jobs — lifting scheduling automation from 34% to 80% and cutting manual scheduling time 30%.** Delivered years before ML became mainstream in operations.
- **Led a 70+ person engineering organization** spanning direct reports and vendor (SOW) teams; delivered high-availability, data-intensive dispatch platforms end to end.
- **Delivered 5 web applications and 1 mobile app** from concept to launch, automating core field-operations workflows and driving measurable efficiency gains.
- Advanced through **4 promotions in 12 years** to Technical Manager; selected for the **Verizon Leadership Pipeline**.

TECHNICAL DEPTH

Applied AI & GenAI: LLMs (GPT, Claude, Gemini, Llama) · RAG · Prompt Engineering · Fine-tuning · LangChain · LangGraph · Agentic AI (n8n) · Vector DBs (Pinecone) · Model Context Protocol (MCP)

AI Engineering & MLOps: Production ML · Model Evaluation & Guardrails · MLflow · Model Serving · AI-Assisted Development (Cursor, GitHub Copilot) · Streamlit

Architecture: Microservices · Distributed & Event-Driven Systems · Multi-Tenant SaaS · Mobile

Languages: Java / Spring Boot · Python · C# · JavaScript / Angular

Cloud & Platform: AWS · Azure · GCP (Multi-Cloud Certified) · Kubernetes · Docker · Terraform · CI/CD · DevSecOps · FinOps

Data: Kafka · PostgreSQL · MongoDB · Event Streaming Pipelines

LEADERSHIP & RECOGNITION

Verizon Leadership Pipeline · Trimble Leadership Circles · AMCHAM Global Leadership · India Engineering Council Representative (500+ engineers)

EDUCATION

Master of Computer Applications (MCA) — Periyar University, Tamil Nadu