

Lakshmi Priya Gopalsamy

Senior Engineering Manager, Target · Resilient platforms. Resilient teams.

Minneapolis · St. Paul, Minnesota

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PROFILE

Technology leader and software engineer with 20+ years building enterprise platforms that hold up under pressure — and teams that do the same. My work sits at the intersection of enterprise architecture, distributed systems, data infrastructure, and AI-driven operations.

20+ Years building enterprise platforms | 15+ Enterprise products built & shipped | 4 Industries — retail, fintech, healthcare, telecom | 6 Fortune 500 companies across the US

CORE FOCUS

Enterprise Platform Engineering — I build the foundational platforms engineering organizations depend on — internal developer tooling, B2C and B2B commerce systems, product data platforms, and service management infrastructure. Across Fortune 500 environments in retail, financial services, telecom, and technology, I've led delivery of mission-critical platforms serving hundreds of teams: replacing fragile legacy systems with resilient, self-service architectures built for long-term scale.

Distributed Systems & Data Infrastructure — I architect and operate distributed systems at a scale most engineers never encounter — real-time event pipelines, high-throughput Big Data platforms, and fault-tolerant systems handling millions of daily transactions. That spans Kafka event architectures, large-scale Spark and Hadoop ecosystems, real-time payment authorization engines, HL7 healthcare data transformation, and REST APIs serving enterprise ecosystems.

AI-driven Operations & Engineering Leadership — I bring an observability-first mindset to every platform I lead — instrumenting systems so anomalies surface before they become incidents. I've shipped generative AI tooling in production, built automated incident response that reduces MTTR, and driven security hardening with measurable compliance gains. Across 7+ years of engineering management, I specialize in translating complex technical systems into high-performing, inclusive engineering cultures.

PROFESSIONAL EXPERIENCE

Senior Engineering Manager — Finance Product & Services

Aug 2025 - Present

Target

Lead engineering for enterprise B2B digital commerce and real-time bank authorization platforms supporting high-volume, business-critical transactions — corporate gift card ordering, account management, and Target Debit Card decisioning across digital and in-store. Partner with product, architecture, security, risk, and business to shape strategy, while focusing on reliability, observability, fraud prevention, and engineering excellence.

Senior Engineering Manager — Data Engineering

Dec 2023 - Jul 2025

Target

Led two engineering teams in Target's Data Platform organization, improving platform reliability, usability, and operational efficiency at enterprise scale. Drove Spark 3 migration, asset lifecycle management, and service migration to Target Application Platform. Served as Peak Captain, coordinating readiness and platform stability during Target's highest-traffic retail periods.

Senior Engineering Manager — Production Engineering

Jun 2020 – Dec 2023

Target

Led teams building service management and operational tooling for incident management, production change visibility, and engineering coordination — integrated with Slack, Zoom, GitHub, Kafka, and ServiceNow. Earlier in the role, built developer experience and operational visibility platforms surfacing real-time status, SLOs, and service relationships across Target's technology ecosystem.

Engineering Manager / Digital Engineer II

Dec 2017 – Jun 2020

Best Buy

Built and led the engineering organization for the Product Data Management platform — the central entry point for vendor-provided product information. Owned platform architecture, API development, supplier integration, and continuous delivery improvements, while shaping team culture and engineering discipline from the ground up.

Technical Lead

Aug 2016 – Dec 2017

Wells Fargo

Led major initiatives during a large-scale migration from GE to Wells Fargo, managing software development end to end while staying hands-on in implementation, mentoring, release execution, and production support. Built secure user account management with mutual authentication in a highly regulated environment.

Technical Lead

Oct 2015 – Aug 2016

Comcast

Technical lead in an Agile environment for API development, batch solutions, and enterprise integrations supporting technician operations and equipment health monitoring. Defined designs, facilitated Scrum, and established CI workflows that improved delivery speed.

Technical Lead

Oct 2013 – Sep 2015

Virtusa / Truven Health Analytics

Led onsite-offshore teams delivering healthcare data transformation solutions, including HL7-to-JSON conversion and bulk message processing. Owned technical design, delivery coordination, and Scrum leadership in a domain where data quality and interoperability are critical.

Technical Lead

Sep 2008 – Oct 2013

HCL Technologies / Cisco

Enterprise application development and technical design for device operations and administrative workflows — requirement analysis, high-level design, web functionality, and build and dependency configuration across a large technical environment.

Software Developer

Jul 2006 – May 2008

Indorion Networks

Started my career across the full software development lifecycle, building a foundation in enterprise application development, implementation, and delivery.

EDUCATION

Master of Business Administration (In progress)

Colorado State University

M.E., Applied Electronics

Sathyabama University, Chennai

B.E., Electronics and Communication

Anna University, Chennai

CERTIFICATIONS & EXECUTIVE EDUCATION

- Women in Leadership, Yale School of Management — Executive education in strategic leadership, organizational influence, and executive decision-making.
- Data Analytics Certification, Cornell University — Advanced data analytics and applied statistics.
- ACM Peer Review Certification, Association for Computing Machinery — Peer review methodology and research quality evaluation.
- ACE Leadership Program, Minnesota Technology Association — Competitive leadership development for senior technology professionals.
- Corporate Leadership Foundations, Best Buy — Enterprise leadership and organizational effectiveness.
- Introduction to AI, Google — Machine learning concepts, applied AI, and responsible AI practices.
- Sun Certification — Java, Sun Microsystems — Core Java development certification.
- Embedded Systems, Accel IT Academy — Low-level systems programming and hardware simulation.

MEMBERSHIPS & HONORS

- Sigma Xi — Full Member — The Scientific Research Honor Society. One of the world's oldest and most prestigious scientific research honor societies, founded in 1886 at Cornell University. Membership recognizes demonstrated excellence in scientific research and original contribution to the advancement of knowledge — members include over 200 Nobel Prize winners.
- IEEE Senior Member — Highest grade of IEEE membership. Fewer than 10% of IEEE's 400,000+ members attain Senior Member grade — it requires demonstrated engineering achievement over at least 10 years.
- IEEE Women in Engineering — Member · Twin Cities Affinity Group Secretary. Global network dedicated to advancing women in engineering and technology.
- IEEE Computer Society Member — Software Engineering Technical Community. The world's leading computing professional society for researchers and practitioners.
- ACM Professional Member — Certified Peer Reviewer. Association for Computing Machinery — the world's largest educational and scientific computing society.
- Hackathon Raptors Fellow — Fellow Member. Fellow-level recognition awarded for expertise, mentorship, and sustained contribution to innovation-driven technology challenges and engineering excellence.
- IICSPA Fellow Member — Cybersecurity & Enterprise Architecture. A prestigious fellowship awarded to professionals recognized for sustained excellence in cybersecurity, information security, and enterprise architecture.

AWARDS & APPRECIATIONS

- 30 Exceptional Women in Engineering Leadership — IWED 2026 — Selected by WomenTech Network as one of 30 Exceptional Women in Engineering Leadership globally, in recognition of contributions to AI governance, enterprise platform engineering, and technology leadership. Published on International Women in Engineering Day 2026.
- Big Data Engineering Excellence — Recognized through two independent technology awards for original contributions to enterprise-scale big data platform engineering.
- Community Leadership Recognition — Top Contributor — Recognized by WomenTech Network as a top contributor to Women in Tech collaborative articles, driving knowledge sharing and community advancement in the global technology sector.

PEER REVIEW & MENTORSHIP

- Invited expert peer reviewer for ~20 international conferences via Microsoft CMT, across AI and data engineering, distributed systems, and emerging technologies.
- Invited panel peer reviewer for the MNTech ACE Leadership Program, evaluating leadership development in the tech community.
- Mentor in the Target Pro Bono Mentorship Program, guiding a startup founder on scaling strategy, enterprise client engagement, and operational maturity.

SPEAKING & CONFERENCE PRESENTATIONS

AI-Accelerated Delivery Needs Refactoring: The CATS Guardrails Framework

PlatformCon 2026 — June 22-24, 2026 · International · Accepted

Building Reliable LLM Systems: Managing Decision Latency and Cognitive Load in the AI Era

Conf42 LLMs 2026 — June 18, 2026 · International · Accepted

Scaling Security with Guardrails and Decision Flow

SecretCon 4 2026 — June 4, 2026 · International · Accepted

Scaling Reliability and Speed in Regulated Enterprises Through Organizational APIs, Guardrails, and Decision Flow

WomenTech Global — May 13, 2026 · International · Accepted

COMMUNITY LEADERSHIP

- Organizer — ACM-IEEE Twin Cities Meetup
- Secretary — IEEE WIE Twin Cities Affinity Group & Ambassador
- Mentor · Judge — Target Women in Science & Technology
- Judge — MN Technology Association ACE Leadership Program
- Sponsor & Leader — Techquity Probono Project
- Owner & Leader — Twin Cities WomenTech Circle