

DINESH MAKHIJA

Technology Leader | AI Innovation, Platform Growth & Scale | Healthcare, Smart Devices & Enterprise | Former Amazon

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Technology Leader | Engineering Transformation & Platform Scale

Built and scaled engineering platforms serving millions of users across healthcare, connected devices, and network security — delivering acquisitions, \$24M+ ARR products, and 70x platform growth. I transform engineering organizations through Agile discipline, research-driven automation, and deliberate AI adoption — building teams that ship faster, cost less, and operate independently.

- Scale: Progressively scaled platform to deliver 70x volume growth across core pharmacy, patient engagement, and patient experience; at Amazon, oversaw CSM adoption grow from 100K to 10M+ active devices across Echo, Fire Tablet, and 1P/3P families in 2 years
- Transformation: Led Agile transformation at Corero delivering concept-to-production in under 12 months; built automated signature research lab at Arbor reducing validation cycles from sprints to hours — a fundamental shift in engineering velocity
- AI Adoption: Integrated AI platform into regulated pharmacy operations — achieving PHI compliance across all patient interactions through automated redaction and quality monitoring; adopted AI tooling across the SDLC improving engineering velocity; collaborating with AI teams to define and prioritize agentic AI use cases for pharmacy operations

PROFESSIONAL EXPERIENCE

Senior Engineering Manager | Blink Health | Jun 2019 – Apr 2026

Westford, MA

- Defined and executed multi-year platform roadmap — aligned quarterly with executive leadership across 8 product domains and 30 services; drove architectural transformation, partner integration prioritization, and technical debt reduction as deliberate portfolio decisions
- Led platform transformation enabling 70x volume growth — led migration of Cloud Pharmacy Services from Aptible to native AWS, broke monolith into event-driven microservices, introduced Camunda workflow orchestration, and replaced third-party dependencies with direct integrations; built observability across endpoint latency, TPS, CPU, and memory to drive proactive performance decisions and eliminate single points of failure
- Delivered touchless prescription processing from receipt to dispense — 40% for new scripts and 70% for auto-refills at under 5 minutes SLA; reduced benefits discovery and pricing SLA from over 4 hours to under 30 minutes; achieved over 50% reduction in operational cost per script
- Built direct integration layer across the pharmacy partner ecosystem — Surescripts, Cover My Meds, Eagle Force, Switch Networks, and LexisNexis; replaced third-party software dependencies with owned integrations, enabling enterprise health plan partner onboarding and platform scalability
- Streamlined Operational Excellence through reusable frameworks — automated CI/CD, built integration test frameworks validating end-to-end pharmacy workflows, and introduced observability and on-call structure; gave the team tools and discipline to own quality and reliability independently
- Extended engineering reach through global team development — built and developed offshore vendor teams across development, QA, and automation; grew offshore leads to own delivery independently, enabling 24x7 operations and expanding engineering capacity without proportional headcount growth

Software Development Manager (L6) | Amazon Lab126 | May 2017 – Mar 2019

Cambridge, MA

- Led development and evolution of Common Speech Middleware for Alexa — enabling consistent voice experiences across Echo, Fire TV, Fire Cube, and Fire Tablet families including Echo Show, the first screen-enabled Alexa device; middleware was the critical orchestration layer serving 10M+ active devices
- Managed a high-performing team of 8–12 engineers — maintained operational excellence and reliability across a 10M+ active device fleet; collaborated with cross-functional partner teams across Alexa, hardware, and device software to deliver diverse experiences across multi-modal devices
- Led design of middleware extensibility for Alexa Local Voice Control — decoupled device functionality from cloud dependency enabling critical offline functions; extended platform across device families with fundamentally different interfaces, form factors, and video players

Senior Director, Engineering | **Corero Network Security** | Apr 2012 – May 2017 *Marlborough, MA*

- Led concept-to-production development of Corero's First Line of Defense DDoS platform — delivered in under 12 months, grew deployed customer base 3–5x over 2 years with a team of 12–15 engineers at 10G full duplex line rate
- Pioneered the platform architecture that remains Corero's core product today — inline packet-based detection with adaptive thresholds, Security-as-a-Service model, and Splunk-integrated real-time attack visibility; reduced mitigation response to under 30 seconds and transformed RCA from days to real-time
- Expanded product portfolio through platform innovation — leveraged MissionPath technology beyond DDoS mitigation into high-speed recording and SSL proxy use cases
- Drove Agile transformation and technology consolidation — improved delivery velocity across the org; took over Signature Research team and managed legacy intrusion detection releases in parallel

Engineering Manager | **Arbor Networks (Ellacoya Networks)** | Jul 2006 – Mar 2012 *Merrimack, NH*

- Led engineering teams across US and India — delivering provisioning, reporting, and management plane for Ellacoya DPI platform across development, deployment, and escalation support
- Developed embedded software for purpose-built DPI hardware platform — custom ASIC for flow processing, regex pattern-matching silicon, and Intel IXP network processors; delivered carrier-grade application detection at 20 Gbps line rate enabling Tier 1 service provider deployments
- Founded Application Signature Research group and grew application database from under 100 to 1,000+ — supported Tier 1 carrier contracts with British Telecom, Bell Canada, and T-Mobile trials; built automated signature lab at less than 1% of existing lab costs with automated version capture, reducing detection and validation cycle from days or full sprints to a few hours
- Authored heuristics-based detection algorithms on Intel IXP microengines — extended detection across Gaming, P2P, VoIP, and Streaming applications; Skype voice vs. chat differentiation contributed to British Telecom contract and resulted in a US Patent

Manager / Tech Lead | **Alcatel-Lucent (WaterCove Networks)** | Oct 2000 – Jun 2006 *Chelmsford, MA*

- Architected the platform that became the first intelligent GGSN commercially deployed worldwide — hot-swappable, high-availability architecture on VxWorks RTOS supporting session rates 5x industry standard; solved the core GPRS challenge of sessions and data arriving on different paths by distributing and synchronizing state in real time across control and data plane boards
- Built DPI-based content charging in embedded C/C++ — deep packet inspection and flow classification enabling differentiated billing by content type; key differentiator that won Orange UK as first customer and contributed to Alcatel acquisition of WaterCove
- Led first customer deployment with Orange UK — secured WaterCove's first production deployment, establishing the platform as the world's first commercially operational intelligent GGSN
- Managed engineering responsibility post-Alcatel acquisition — took over embedded iGGSN team and led product ownership transition to Bratislava engineering team

Tech Lead / Principal Engineer | **Lucent Technologies & Newbridge Networks** | Mar 1995 – Sep 2000 *Westford & Andover, MA*

Served as Tech Lead for LAN Emulation, BGP-4 protocol integration with core routing platform, and ATM switches at carrier scale — foundational embedded systems and protocol work in C/C++ on VxWorks RTOS underpinning a career in high-performance platform engineering.

EDUCATION & CREDENTIALS

Wharton Executive Leadership Program in AI & Analytics

Sep 2025 – Apr 2026

University of Pennsylvania | Leadership in AI & Analytics | Leading and Managing High-Impact Teams

Bachelor of Engineering – Electronics and Communication

Delhi College of Engineering (Delhi Technological University), India

PATENTS

Patent: US Patent — Method and System for Monitoring Flows in Network Traffic | Arbor Networks