

Arthur Rosa

Engineering Leader | AI products, marketplace systems, and platform engineering

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Summary

Hands-on engineering manager with 9+ years of experience across LinkedIn and Cimpres, spanning AI evaluation, recommendations, commerce, cloud infrastructure, and manufacturing systems. Player-coach leader who sets technical direction, develops senior engineers, and ships zero-to-one products in ambiguous environments.

Experience

Engineering Manager, LinkedIn 2022 – 2026

Managed teams of 5-11 engineers across junior, senior, and staff levels while staying deeply hands-on in architecture, implementation, and launch execution across jobs, ads, mobile commerce, and AI product initiatives.

- Led an 8-engineer team building LinkedIn Crosscheck, a blind side-by-side frontier-model evaluation product; released to the public in under 3 months while authoring 100+ production pull requests.
- Architected LinkedIn Marketing Solutions Mobile Boosting, a projected \$29M first-year revenue opportunity; led LinkedIn's first Apple Advanced Commerce API integration and reusable payments infrastructure across marketing, business applications, finance, and payments platform teams.
- Led Immersive Video Ads minimum viable product across video, ad serving, and ad foundation teams, delivering on schedule and improving video views and completion rates by ~10% in LinkedIn-on-LinkedIn campaign tests.
- Built LinkedIn job-seeking preferences platform and salary filters, growing salary-preference adoption 300% to 8M users and supporting partner-built experiences used by 500K daily active users.
- Introduced AI-assisted development workflows across the team, measuring 40%+ development-time savings across 45 completed tasks using pre-work estimates and source-control evidence.
- Sustained high engagement through multiple reorgs, with Employee Voice Survey scores up to 88/100 (+12 vs company, +16 vs org), while promoting engineers through structured growth plans and calibration advocacy.
- Owned launch-readiness engineering across data compliance annotations, content moderation, access approvals, OpenTelemetry metrics, alerting, and operational triage flows.

Principal Engineer, Engineering Manager, Vistaprint / Cimpres 2017 – 2022

- Built reusable AWS/container deployment frameworks adopted as templates across Cimpres' modernization from aging on-prem datacenters to cloud-native services; reduced on-call pages 80%.
- Designed and implemented Cimpres' first global multi-region deployment model for manufacturing services, improving resilience and scalability across global operations.
- Converted backend stack from Amazon ECS to Kubernetes to improve monitoring, scaling, and multi-region deployment; deployed core services in Ireland and Mumbai to reduce latency for plants across Asia, Australia, and India.
- Led Pipelines, a configurable manufacturing workflow product that replaced multiple bespoke services and processed millions of jobs across all manufacturing plants in its first few months.

- Engineered integrations with industrial hardware by reverse-engineering protocols in constrained manufacturing environments, enabling reliable solutions where vendor documentation and standard interfaces were unavailable.
- Built direct-to-garment error-prevention scans and embroidery press connection software that reduced loading errors to near zero and helped prevent wrong-design production; solution rolled out globally.
- Created talent rotation program that broadened engineering skills, built succession depth, and supported promotion of 75% of the team.

Social Impact & Community

Volunteer Engineer, Mentor, LinkedIn Social Impact 2022 – 2026

- Volunteered on Career Outcomes Tracker, a privacy-preserving clean-room product helping nonprofits, universities, and training programs measure employment outcomes with aggregated LinkedIn data.
- Partnered directly with nonprofit organizations to deliver org-specific career-outcome insights; earned praise for responsiveness, professionalism, and depth of analysis.
- Built API-driven automation replacing manual partner workflows, enabling more flexible evaluations and helping the team scale beyond the original process.
- Mentored college students through LinkedIn's Possibilities in Tech Scholarship, supporting future software engineers through career guidance and technical development.

Board Member, Engineer, GoFAR Maine 2016 – present

- Builds and maintains GATool, a React and .NET Core application used by FIRST Robotics game announcers at competitions worldwide.
- Serves on the board of GoFAR Maine, supporting FRC teams across Southern Maine.

Patents

US 12,554,759: Recommendation Generation Using User Input Feb 2026

- Co-inventor of an AI recommendation system that transforms sparse user input into taxonomy-aware, verified job recommendations using embeddings, vector search, and domain-specific prompt generation.

Skills

Leadership: Engineering management, hands-on technical leadership, technical strategy, roadmap planning, senior engineer development, performance calibration, cross-functional execution

AI, Product & Marketplace Systems: LLM evaluation, model comparison, RAG, embeddings, recommendation systems, jobs marketplaces, ads, mobile commerce, payments, personalization

Platform & Infrastructure: Distributed systems, service architecture, cloud-native migration, Kubernetes, Docker, Terraform, AWS, Azure, CI/CD, OpenTelemetry

Languages & Tools: C#, Python, Java, Rust, TypeScript, JavaScript, C++, Swift, React, Node.js, .NET Core

Data & Workflow Tools: SQL, Postgres, MySQL, MongoDB, Airflow, Flyte, GitHub, GitLab CI/CD, Jira

Education

Worcester Polytechnic Institute, BS in Robotics Engineering and Computer Science – Worcester, MA 2013 – 2017