Rafael Konrath Damaceno

Engineering leader · Distributed systems, Kafka, reliability and developer productivity

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PROFILE

Engineering leader with 20+ years in software and 8+ years managing teams at Amazon and Meta. I led three AWS Health teams (20 engineers), two through engineering managers, hired about two dozen engineers and supported 10+ promotions. Today I lead the Amazon MSK team that owns data plane workflows and observability agents on hundreds of thousands of Kafka brokers, and I owned MSK's three-team ZooKeeper-to-KRaft migration.

Strengths: distributed systems and Kafka · highly available AWS architecture (active-active, multi-region) · reliability and incident reviews · observability · CI/CD and DORA metrics · multi-team leadership and hiring · AI agent harnesses

Stack: Java, Rust, TypeScript and Node.js, Python · Kafka (Amazon MSK, ZooKeeper, KRaft) · AWS DynamoDB, Lambda, S3, EC2, API Gateway, Route 53, CloudWatch, CDK · earlier C#, C++, Delphi, ABAP

EXPERIENCE

Amazon · Software Development Manager, Seattle

Jul 2022 – present

Amazon MSK · One team, 10 engineers

Aug 2025 – present

- Owned the in-place ZooKeeper-to-KRaft migration program, with about 12 engineers across three teams. It launched in August 2026: customers move an MSK cluster on Kafka 3.9 to KRaft in one online upgrade. Kafka 4.x supports only KRaft.
- Set the program's test strategy, acceptance criteria and regression bars. Reviewed designs and code, and fixed bugs.
- Reduced silent failures in the observability agents by making monitoring part of the team's Definition of Done.
- Cut the time from merged code to the first production region, using failure data to decide which dependency failures should block a release.

Amazon Pay · One team, 10 engineers

Aug 2024 – Aug 2025

- Moved our releases to full continuous delivery in 2025 and removed manual release work. Deployments went from monthly to more than four a week, a 16x increase, tracked with DORA metrics.
- Built and launched subscription bundling: merchants sell their own subscriptions packaged with Amazon.com products, sold by the merchant or by another seller.

AWS Health · Three teams, 20 engineers, two through engineering managers

Jul 2022 – Aug 2024

- Shaped all three roadmaps with product managers and the two engineering managers, splitting capacity across new features, operational improvements, maintenance and resilience.
- The teams built resource-level impact notifications in the AWS Health Dashboard. They reach customers in under five minutes and cut resource discovery time by about 30 minutes per incident.
- Built a real-time view of AWS service health as customers experience it, designed by working backwards from the customer, so internal teams could see impact at a glance.
- The incubation team's proof of concept let AWS executives scale outreach to their counterparts at affected customers during major service events.

Across Amazon assignments

- Wrote annual plans (OP1 and OP2) with team goals and headcount, and interviewed 100+ candidates.
- Developed engineers and engineering managers along their career tracks through mentoring, coaching and purpose-driven goals, leading to 10+ promotions.
- Wrote root-cause analyses (COEs) of technical failures.

Meta · Software Engineering Manager, London

Dec 2020 – May 2022

I started on Instagram commerce for small businesses, then built and led two avatar teams with user research, data science, design and 3D art partners.

- Avatar sticker rendering: cut rendering time and storage costs while balancing CPU and GPU load, through hot and cold caching, lazy and dynamic rendering, and job sequencing.
- Avatar creation for mobile and VR: used user research and A/B experiments with data science to raise user satisfaction and how well people identified with their avatars.
- Instagram: built and launched opt-in automatic translation of buyer-seller messages in Europe, so small businesses and their customers could each write in their own language.

Amazon Web Services · AWS Kumo, Cape Town

Jul 2017 – Nov 2020

Software Development Manager (Jun 2018 – Nov 2020), managing two teams · Software Development Engineer (Jul 2017 – Jun 2018)

Kumo builds the systems AWS Support runs on. I joined as an engineer on the case backend, which serves the public AWS Support API, and then managed two teams.

- Proposed the active-active, multi-region architecture for the case backend. With it and Lean continuous improvement, my teams raised availability from 99.99% to 99.999%.
- Cut unplanned urgent alarms for the AWS Support API from dozens a week to about two a month, by removing recurring causes found through five-whys analysis.
- Delivered a new case management console from concept to launch in 12 months with Scrum, and moved 1,000+ support engineers onto it.

SAP · São Leopoldo, Brazil

Oct 2010 – Jul 2017

Software Developer, Product Owner, Scrum Master and Agile Coach

I worked on SAP's ERP and HR (HCM) products for Brazil, Latin America and the U.S., including Affordable Care Act reporting, moving between building, owning and coaching.

- Product Owner. Led oil, gas and mining localization for Brazil (IS-Oil and IS-Mining), defining requirements with the largest Brazilian companies in those sectors.
- Scrum Master. Sped up delivery of Brazilian regulatory changes, bug fixes and support tickets for the sales, distribution and inventory modules (SD and MM).
- Developer and architect. Designed SAP's new solution for Brazilian tax credits on fixed assets (ICMS CIAP), with fully automated regression tests and exploratory testing.
- Agile coach. Trained 300+ engineers across Brazil and Germany in Lean software development, Scrum and test-driven development, including SAP's Agile Software Engineering program.
- Co-inventor of the first granted patent to originate at SAP Labs Brazil, also known as SAP Labs Latin America.

Earlier engineering roles · Brazil

2003 – 2010

Embedded software and developer tools (compilers, debuggers and IDEs), plus C#, .NET and C++ systems for industrial automation, test automation and hardware integration. At Altus, helped build MasterTool, an IDE for programming industrial controllers, and moved it from C++ to C# and .NET; earlier wrote hardware acceptance-test software and RS-232 and Ethernet drivers. At Dell, profiled C# applications for performance.

Jan 2010 – Mar 2010 **Astech Brasil** (part-time, alongside Altus) · Software Consultant

Apr 2008 – Nov 2010 **Altus Sistemas de Informatica** · C# Developer

Nov 2007 – Apr 2008 **Meta IT** (no relation to Meta Platforms) · C# Developer

Apr 2007 – Aug 2007 **Dell** · C# Developer

Feb 2005 – Mar 2007 **Altus Sistemas de Informatica** · Software Developer

Mar 2004 – Jan 2005 **Altus Sistemas de Informatica** · Test Engineering Developer

Aug 2003 – Mar 2004 **Cali – Softwares para Calibração** · Software Engineer

AI ENGINEERING AND OPEN SOURCE

I specify requirements, review designs and code, and decide what ships. AI agents implement code and tests; automated checks and independent reviews send failures back for correction. I designed, built and maintain two open-source tools this way.

- **MCP Compression Proxy**. An MCP gateway: agents find tools on demand through a CLI instead of loading every tool into context, and a shared daemon reuses one server process across clients with matching configuration and credentials. 62 test files, CI green. (2,585 npm downloads.)
- **Local Skills MCP**. An MCP server that serves one local skills library to any MCP client and loads each skill only when needed. (40 GitHub stars, 5,805 npm downloads.)

Public GitHub and npm counts as of November 7, 2026.

EDUCATION AND CREDENTIALS

B.S. Computer Science, Universidade do Vale do Rio dos Sinos (Unisinos), Brazil

Co-inventor, U.S. Patent 10,437,587: software package analyzer for increasing parallelization of code editing. Filed November 17, 2015, issued October 8, 2019, assigned to SAP SE. The first granted patent to originate at SAP Labs Brazil.

ISTQB Certified Tester, Foundation Level

Languages: Full professional English. Native Portuguese.