

□ Summary

A highly accomplished and visionary technology leader with 20+ years of experience driving digital transformation and building next-generation platforms across startups and Fortune 500 companies. Expert in enterprise architecture, AI/ML integration, microservices, and cloud-native solutions, with a proven track record of leading high-performing engineering teams (up to 30+) to deliver scalable, secure, and mission-critical systems.

□ Skills

AI/ML & Emerging Tech: AI-assisted Development, RAG Pipelines, Prompt Engineering, Large Language Models (Claude, GPT-4), Developer Copilot Tools

Architecture & Design: Microservices Architecture, Service-Oriented Architecture (SOA), Cloud-Native Design, Enterprise Integration Patterns, System Modernization, Data Governance

Cloud Platforms: Google Cloud Platform (GCP), Amazon Web Services (AWS), Microsoft Azure, OpenStack, Kubernetes, Terraform

Programming & Frameworks: Java, Spring Boot, JavaScript, SQL, Python, Node.js

Databases & Data: MongoDB, Oracle DB, MySQL, Apache Kafka, Apache Avro, BigQuery, Hadoop MapReduce, NoSQL

DevOps & Tools: CI/CD Pipelines, Splunk (Monitoring/Alerting), Observability, Blue/Green Deployments, Canary Deployments

Cybersecurity & IAM: Identity & Access Management (IAM), Authentication (2FA, SSO), Policy-Based Access, Fraud Detection, Glue (Open-source IAM)

Leadership & Management: Technical Advisory, Team Leadership (30+ engineers), Mentoring, Strategic Planning, Cross-functional Collaboration, Rapid Prototyping

□ Professional Experience

Head of AI Innovation — sammuthu.com, Sunnyvale, CA

Nov 2021 – Present (3 yrs 9 mos)

- Pioneered exploration into AI-assisted development, automation, and emerging technologies, treating role as a personal R&D lab to stay ahead of industry trends.
- Built internal tools and rapid prototypes leveraging advanced AI models including Claude, GPT-4, Copilot, and Windsurf.
- Designed and implemented RAG (Retrieval Augmented Generation) pipelines and prompt-engineered workflows to enhance developer productivity.
- Developed sammuthu.dev as a digital playground to showcase technical prowess and practical application of new technologies.

Developer Advisor — Wells Fargo Bank (NTT DATA Services), San Francisco Bay Area

May 2020 – Present (5 yrs 3 mos)

- Key contributor to the modernization of a mission-critical banking platform over 5+ years, enhancing performance and scalability for over 30 million customers.
- Collaborating on the decomposition of a monolithic Oracle-based system into scalable microservices using Spring Boot, MongoDB, and message-driven architecture.

- Designed and implemented a robust two-way data synchronization strategy between legacy Oracle DB and new NoSQL stores, ensuring seamless blue/green rollouts and rollback safety.
- Developed and advised on secure authentication services, including custom 2FA microservices and Mobile Verify integration.
- Delivered critical interdiction and security microservices to support customer risk workflows and fraud detection pipelines.
- Architected a hybrid SOAP + REST transition strategy, enabling modern API adoption while maintaining compatibility with legacy consumers.
- Implemented scalable monitoring and alerting solutions with Splunk, achieving zero-downtime migration of core banking features.
- Served as a technical advisor to development teams, ensuring consistent and compliant implementation of modern enterprise patterns.

Co-Founder and CTO — Stealth Startup (IAM / Cybersecurity), San Ramon, CA

Aug 2020 – Nov 2021 (1 yr 4 mos)

- Transformed a decade-old cybersecurity business into a modern IAM services and product powerhouse.
- Reimagined the company's digital presence, launching a modernized website and branding to reflect enterprise-grade identity solutions.
- Built and led a high-performing engineering team of 30+ engineers, scaling service delivery and fostering internal innovation.
- Delivered custom IAM solutions by integrating and extending the Glue open-source IAM platform, competing effectively with industry leaders like Okta, Azure AD, Ping Identity, and SailPoint.
- Spearheaded complex integrations with enterprise identity stacks, focusing on authentication, SSO, policy-based access, and compliance tooling.
- Drove strategic technical decisions, ensured cross-functional execution, and provided hands-on coding to ship secure, scalable, and client-facing IAM implementations.

Technology Strategist and Chief Architect (CTO) — Stealth Mode Startup Company, San Francisco Bay Area

Dec 2018 – May 2020 (1 yr 6 mos)

- Led the technical vision and execution for an early-stage stealth startup focused on cloud-based license management for SMBs.
- Played a hands-on role from inception, architecting the system, writing the initial codebase, and deploying full production pipelines.
- Designed and implemented scalable microservices using Java, Spring Boot, and Google Cloud Platform.
- Built and managed a complete CI/CD pipeline, leveraging Kubernetes and Terraform for infrastructure automation.
- Developed a real-time data pipeline using Kafka and Avro, integrated with BigQuery for advanced analytics.
- Established a robust data governance model and configured IAM roles and software-defined networks for enterprise-grade security.
- Created best practices for Blue/Green and Canary deployments to support continuous delivery.
- Actively involved in hiring and mentoring engineers, significantly elevating the technical capabilities of the team.

Engineering Team Lead — MediaKind (formerly Ericsson Media Division), United States

Jul 2018 – Nov 2018 (5 mos)

- Continued to lead the system monitoring and infrastructure roadmap following Ericsson's media division spin-off.
- Finalized production deployment of a Big Data pipeline and observability agents built on Kafka.
- Supported critical handover of REST APIs and microservice containerization for scalable cloud deployment, ensuring engineering continuity.

Engineering Team Lead — Ericsson (Global)

Jun 2015 – Nov 2018 (3 yrs 6 mos)

- Led the architecture and implementation of an end-to-end observability platform within Ericsson's media division (IPTV).
- Designed and deployed a scalable Big Data pipeline using Apache Kafka to collect system metrics (CPU, memory, I/O) across distributed systems.
- Built dashboards and webhook-based alerting systems for Network Operations Center (NOC) teams.
- Spearheaded the design and development of REST APIs and a recommendation engine, akin to Netflix and YouTube.
- Mentored engineers, led automation of infrastructure pipelines, and containerized microservices for deployment across Azure, AWS, and OpenStack environments.

Engineering Team Lead — Hewlett-Packard (Global)

Oct 2010 – Jun 2015 (4 yrs 9 mos)

- Architected and implemented microservices powering the webOS mobile ecosystem (in-app purchases, warranty registration, receipt management, catalog browsing) during HP's acquisition of Palm.
- Pioneered an early JavaScript-based warranty registration application running on Google's V8 engine, an early enterprise adoption of V8 for embedded apps.
- Led the re-architecture of mobile services for HP enterprise platforms after the company exited the tablet/phone market.
- Built a recommendation engine using Hadoop MapReduce on AWS, ranking app usage and trends to enhance App Store discovery.
- Partnered with DevOps to establish CI/CD pipelines and observability tools, supporting scalable delivery and operational excellence.

Sr. Architect Java & Next Generation Web Technologies — Dun & Bradstreet Software (Global)

Aug 2009 – Nov 2010 (1 yr 4 mos)

- Redesigned and decoupled legacy monolithic web services into reusable, modular APIs to significantly improve scalability and maintainability.
- Led architectural modernization efforts using Java and service-oriented patterns.
- Envisioned and developed an innovative B2B social feedback platform, enabling community-driven insights for credit-related information and providing a modern alternative to traditional credit profiling.

Principal Architect — Early stage startup (Global)

Jan 2008 – Aug 2009 (1 yr 8 mos)

- Architected and built a revolutionary Web Desktop OS, delivering a fully interactive, browser-native desktop experience entirely in JavaScript before modern frameworks existed.
- Built the entire front-end platform from scratch with over a million lines of JavaScript, emulating a full desktop UI including file system, drag-and-drop windows, taskbar, and app launcher.
- Integrated Microsoft Office applications via Citrix Java Applet for seamless in-browser document editing.
- Personally set up the data center, deploying bare-metal servers and optimizing for global reach and uptime.
- Architected the backend to scale to millions of users using a lean MySQL-based setup, optimizing performance under high concurrency.
- Assembled and led international engineering teams in Belarus and Sweden, scaling operations while maintaining startup agility.
- Recognized as one of the top real-time web applications globally during the Web 2.0 era for its pioneering browser-native computing.

SOA Architect - Consultant — Wells Fargo Bank (Global)

Nov 2006 – Dec 2007 (1 yr 2 mos)

- Designed and developed SOA-based software services to integrate diverse enterprise systems using web services and enterprise messaging infrastructure.
- Implemented an AJAX-based XML editor for automatic loan document generation, embracing early Web 2.0 principles.
- Engineered dynamic input form generation from XML Schema Definitions (XSD), enabling QA and business users to test flows independently.
- Integrated BEA WebLogic, Windows Services, and third-party applications via IBM MQ Series for robust messaging and system interoperability.
- Played a key role in modernizing the document processing pipeline and promoting decoupled architecture across legacy systems.

Lead Architect/Tech. Lead/Lead Developer - Consultant — Hartford Life (Global)

Dec 2002 – Nov 2006 (4 yrs)

- Took over a struggling \$30M+ modernization project, transforming a latency-ridden Java Applet solution into a blazing-fast user experience.
- Architected and hand-built an AJAX + JavaScript rules engine, handling dynamic questionnaire logic (150+ questions with nested dependencies) entirely in the browser, reducing rule execution from 1 minute to milliseconds.
- Enabled business analysts to define rules in spreadsheets, which were then converted to JavaScript for dynamic runtime execution from the database.
- Led a globally distributed team (10–20 engineers), built a custom code generation and feature deployment system, and integrated backend services via XML messaging.
- This project was pivotal in demonstrating the full potential of JavaScript years ahead of its mainstream adoption.

Architect/Principal Software Engineer — oneRev Inc - startup (Acquired by Agile part of Oracle) (Global)

Apr 2001 – Nov 2002 (1 yr 8 mos)

- Designed and built a highly configurable, web-based workflow engine for the supply chain industry, enabling dynamic application flows driven by configuration.
- Developed one of the earliest JavaScript rules repositories, executing conditional logic based on workflow state and user input, predating most modern rule engines.
- Created a modular database schema to support template-driven application generation, significantly reducing time-to-market for new customer deployments.
- Pioneered real-time, browser-based rule execution, laying a key architectural foundation for future breakthroughs in interactive web systems.

Sr. Software Engineer — Cisco & Voquette (Startup) (Global)

Jul 2000 – Apr 2001 (10 mos)

- Contributed to multiple early-stage web-based product initiatives, including internal workflow tools and dynamic applications for Cisco.
 - Developed full-stack features across the web layer (JavaScript), business logic (Java), and persistence layer (SQL-based RDBMS).
 - Helped define modular application architecture patterns, emphasizing clear separation of concerns and scalable design in fast-paced environments.
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□ **Contact**

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