

# Aleksi Asikainen

Startup CTO, Chief Architect, Principal Engineer, Founding Engineer, Senior Staff Engineer

✉ ping@getsalieri.com

🌐 linkedin.com/in/aleksiasikainen

🐙 github.com/salieri

🇺🇸 US permanent resident, EU citizen

👉 Can relocate

## Executive Summary

20+ years of hands-on software leadership.

Senior technologist who **delivers complex technology initiatives**. Translates ambiguous ideas into **scalable, production-grade platforms**, – including customer-facing products, agentic systems, and distributed cloud environments.

Proven at **0→1, 1→N, and scale-up inflection points**. Recently built a system that transforms **100+ hours of audio** into structured inference **every minute**.

Brought in to **raise the technical bar, define technical direction, execute complex work, and scale teams and systems**. Advisor to **founders, C-level, and VPs**.

Your solution to: *"How do we build this?"*

Technology generalist: backend, web, mobile, desktop, data, ML/AI, QA, platform, infrastructure, and DevOps. Experience in product, design, and UX. Loves **building**.



# Impact Case Study – Abridge

## Context

Joined shortly after Series B (\$30M), as the company prepared to onboard its first major enterprise customer. Engineering org (~10–15 engineers) had iterated rapidly to reach product-market fit, leaving the core audio-to-notes pipeline fragile, opaque, and increasingly risky to scale.

## Role & Scope

Acted as a horizontal senior technical leader, taking ownership of cross-cutting systems with no natural product owner. Led end-to-end redesign of the core audio-to-notes processing pipeline used by multiple product verticals; served as primary technical decision-maker and on-call escalation point until ownership transitioned to a dedicated team.

## Key Decisions

- Reframed the audio-to-notes pipeline as a **mission-critical internal product** rather than a collection of ad-hoc functions.
- Architected the new isolated orchestration service using **domain-driven design**, deliberately separating pipeline concerns from product code to reduce blast radius and cognitive load.
- **Selected Temporal** as the workflow execution layer to enable deterministic, debuggable workflows with replay capability — trading short-term learning cost for long-term reliability and operability.
- Moved execution from cloud functions to **Kubernetes-based services** to regain debuggability, operational control, and vendor independence.
- **Centralized all database writes** behind the pipeline, explicitly blocking direct ML access to prevent data corruption, race conditions, and side effects.
- Required **telemetry** and **observability** mechanisms to ensure reliability at scale.

## Contributions

- Defined and owned **architecture, technical product design, and implementation** of the new pipeline from the ground up.
- **Reverse-engineered** implicit system behavior from legacy code to establish explicit baseline requirements, then defined forward-looking requirements under uncertain scale and evolving product needs.
- Enforced a single **standardized API boundary** for all pipeline entry points, eliminating divergent implementations and making system behavior observable and predictable.
- Implemented **document validation schemas** for all I/O operations (database, APIs, blob storage...) to ensure data integrity.
- Introduced **end-to-end testing**, strict linting standards, **structured documentation**, flow diagrams where none previously existed.

- Built and ran **load tests** to validate scaling behavior prior to broad customer migration.
- Designed **reusable infrastructure** and **project templates** (CI/CD, Helm charts, service scaffolding) that later became the foundation for other engineering efforts.

## Outcomes

- Successfully migrated the first enterprise customer to the new pipeline within ~7 months; completed **full customer migration** incrementally over the next ~2 months to minimize risk.
- The pipeline now processes over **100 hours of audio per minute**. It has met the needs of the business through significant growth in customer base and usage volume.
- Achieved a step-change improvement in **system reliability, debuggability, and operational visibility**; for the first time, engineers could inspect live workflow state, diagnose failures deterministically, and recover safely.
- Enabled the ability to build **monitoring and alarms** against telemetry to reduce reaction times to production issues.
- Architecture **scaled with company growth** and became the foundation for subsequent pipeline work.
- Established **reusable project templates** (CI/CD, Helm charts, service layout) that were adopted across the engineering organization.
- Temporal became a **standard platform primitive** reused well beyond the original pipeline project.

## Collaboration

Worked in close partnership with the VP of Engineering, who sponsored the initiative as a critical business enabler. The project was self-initiated, proposed, and initially implemented solo before being transitioned to a dedicated team for long-term ownership.

## Work History

### Senior Staff Software Engineer

ABRIDGE | 01/2024 – Present

Healthcare AI startup | 300 employees | \$700M series B-E

- Joined Abridge at ~30 employees. Company's first senior staff engineer.
- Operated through hyper-growth and multiple funding stages (A16Z, Khosla Ventures, Elad Gil, IVP).
- Drove core technical direction by leading architecture decisions and selecting foundational technologies (e.g., Temporal) that scaled with the business.
- Proposed, architected, and implemented critical core systems, including large-scale orchestration of audio into structured clinical notes.
- Led high-risk, high-precision internal initiatives such as major database migrations, owning design, execution, and reliability outcomes end to end.

# Chief Technology Officer

ARENA | 08/2021 – 12/2022

Audience engagement startup | 50 employees | \$13.6M series A

- Owned engineering, architecture, and IT.
- Scaled the platform through Series A led by CRV, Craft Ventures, Artisanal Ventures, and Vela Partners.
- Cut technical operations costs 40%+.
- Established engineering practices: code reviews, CI, planning, metrics-driven operations, and standardized technical processes.

# Chief Technology Officer

OPTYM | 10/2019 – 03/2021

B2B SaaS | Optimization & Decision Science | 250 employees | \$25M revenue

- Mentored senior engineers and technical leaders, reinforcing execution quality and engineering culture.
- Established shared architectures, policies, and delivery standards to enable rapid product launches.
- Worked directly with customers, partners, and executives to design new products, deliver bespoke solutions.
- Supported Optym's SaaS technology ventures.

# Chief Architect

SOLERA | 06/2015 – 09/2019

Multinational | Risk management & asset protection | 6,000 employees | \$1.1B revenue

- Led strategic R&D and product incubation initiatives for the office of the CEO.
- Assessed emerging technologies for enterprise adoption, including ML, blockchain, AR/VR, IoT/telematics, digital identity, large-scale data platforms, and cloud-native SaaS (AWS).

# Head of Technology

HPI | 11/2013 – 05/2015

Private company | Automotive data & asset protection | £20M revenue

- Led end-to-end product development and delivery for new consumer products, from concept through launch.
- UK market leader in vehicle history checks.

(Subsidiary of Solera)

# Chief Technology Officer

TALMIX | 01/2013 – 10/2013

Management consulting startup | Talent search | £2M series A

- Rebuilt a legacy platform into a scalable two-sided marketplace. Led search and matching improvements to increase relevance of consultant recommendations.
- Led search and matching improvements to increase relevance of consultant recommendations.
- Owned all technical operations.

(Previously known as MBA & Company)

# Technical Director

MADBID | 06/2008 – 12/2012

Entertainment shopping startup | 75 employees | £4M Series A | £10M revenue

- Co-founded MadBid.
- Led all technology and software development from bootstrap to scale.
- Built and ran the entire engineering organization through rapid growth.

# Reference Projects

## Resume

[github.com/salieri/resume/](https://github.com/salieri/resume/)

This resume as code. Extremely over-engineered. Start here.

## JS VFX

[salieri.github.io/js-vfx/](https://salieri.github.io/js-vfx/)

Visual effects written in pure JavaScript.

## Tartarus Deep Learning Framework

[github.com/salieri/tartarus-deep/](https://github.com/salieri/tartarus-deep/)

From-the-ground-up deep learning framework for TypeScript.