Kousha Talebian

Software Engineer

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Technical Skills

Coding

Expert: Full Stack Generalist, TS/JS, Java, Node, SQL (Postgres, MySQL, DynamoDB).

Proficient: Temporal, Bash, Python, Lua/OpenResty, PHP.

AI

Built multiple voice and text agents in collaboration with OpenAI, Google Gemini and Anthropic. Contributed to development of A2A and MCP.

DevOps & Infrastructure

Expert: Over a dozen services from prototype to GA with full observability, scaling, security, and production infrastructure in high-availability cloud/native environments.

Proficient: AWS, Docker/Kubernetes, CI/CD pipelines (GitHub Actions, Jenkins, Buildkite), monitoring stack (DataDog, Prometheus, Grafana)

Personal Ventures

Zkout (2025 — Present)

Internal tool built with **Python, Electron, and OpenAI** to analyze 500+ resumes against job requirements and generate candidate summaries. Used as part of a consulting practice to deliver hiring recommendations to clients.

Common Ground (2023 — Present)

Founded a community platform to solve the friend-making problem in cities — built with **Ts.Ed, React,** and **Aurora MySQL,** deployed via **AWS Elastic Beanstalk** with **CloudFront CDN** and a custom CI/CD pipeline. Scaled to **2,000+** active members and **$50K+** in ticket sales from **3,000+** event registrations.

Education

University of British Columbia
Master of Applied Science

University of British Columbia
Bachelor of Engineering Physics

Full-stack engineer with **15+ years** of experience building and scaling distributed systems. I've led teams of **8+ engineers** and cross-functional orgs of **50+** to take multiple products from p**rototype to GA**, serving **millions of users**.

I specialize in **rapid prototyping**, **performance optimization**, and building **resilient infrastructure** for **high-traffic, production-grade** environments.

Currently focused on **AI systems**, I'm actively contributing through hands-on research, hackathons, and prototyping with emerging protocols like **MCP and A2A**.

Twilio (Principal-level R&D)
Vancouver, Canada | Jun 2024 — Present

`AI` `A2A/MCP` `Evals` `RAG` `LLM Observatory` `Prompt Foo` `K8s`

- Leading modernization of Twilio's API for LLMs, tool calling, and agent-based architectures.
- Leading confidential Horizon 3 R&D initiatives under NDA, exploring future-facing AI opportunities outside Twilio's core offerings.
- Engineered integrations for OpenAI and Gemini product launches, leading to 1 filed (unpublished) patent and 3 publications.
- Designed internal LLM evals and observability tooling using LangChain, Lakera, Galileo, Firecrawl, Pinecode.
- Developed the real-time voice channel for Twilio AI Assistant using Media Stream, reduced LLM response latency by 85% (2s → 300ms).

Twilio (Principal Engineer)
Vancouver, Canada | May 2020 — Jun 2024

`Temporal` `AWS` `Java` `TypeScript` `System Design` `Docker`

- Embedded as a 'loan architect' across teams to lead new product designs and resolve cross-functional architectural misalignments.
- Designed and implemented degraded fallback for Twilio Flex, ensuring graceful service continuity under partial downtime.
- Architected next-gen execution engine for Twilio Flex with Temporal (scaling to 1k+ transitions/sec — 5× the throughput of Studio); led to US patent 2023/0351290 A1.
- Reduced Flex edge service incidents from nearly biweekly to near-zero through through chaos testing, expanding observability, and hardening CI/CD.
- Scaled Flex edge service to 1k+ req/sec, outperforming API edge benchmarks by 10× in sustained throughput.

Twilio (Staff Engineer)
San Francisco, CA | Apr 2016 — May 2020

`Lambda` `Java` `React` `OpenAPI` `ElasticSearch` `Kafka`

- Launched developer platform tools (Functions, Studio, API Explorer, TwiML Bins, Debugger, CLI) featured at Twilio Signal and adopted by thousands of developers.
- Drove Twilio Studio to GA; supported GA readiness for Functions.
- Built native API and CLI for Flex's customization engine, replacing manual deploys and enabling over 70% of customers to deploy UI/workflow plugins seamlessly.
- Modernized legacy UI stack by leading migration to React and a new front-end deployment pipeline used org-wide.

iCracked (Software Engineer)
San Francisco, CA | Feb 2015 — Apr 2016

`Node` `JavaScript` `Linux/Debian` `SoC`

- Designed and shipped battery-powered diagnostic computers for field use, featuring custom Linux OS that booted twice faster than Debian.
- Built dashboard for remote monitoring, OTA updates and device management of diagnostic devices used by field technicians.