

Sam Trouy

Full-Stack Software Engineer

901-609-0511 · smltr@proton.me · smltr.github.io · linkedin.com/in/sam-trouy

Summary

Full-stack software engineer with 5 years of experience building production systems from the ground up. Specialized in rapid prototyping, systems architecture, and shipping features that matter. Track record as a founding engineer at early-stage startups where I owned critical infrastructure, built core APIs, and shipped fast to production. Comfortable working independently or embedded with customers, whatever gets the job done.

Experience

Freelance Software Engineer · May 2025 – Present

Building custom solutions for early-stage companies and exploring next-generation AI tooling.

- Developing full-stack applications for clients across fintech, productivity, and data visualization domains
- Architecting and deploying scalable backend systems using Go, Node.js, and modern cloud infrastructure
- Building AI-powered prototypes and integrations using LLM APIs, exploring novel interaction patterns
- Rapid iteration on MVPs—shipping working products in days, not months
- Consulting on technical architecture decisions and development workflows for non-technical founders

Founder & Lead Engineer · LanguageLabs · Apr 2023 – May 2025

Founded and built an AI research company exploring production-ready agentic systems and next-generation developer tools.

- Architected and deployed experimental AI systems with self-modifying instruction sets and advanced reasoning capabilities
- Built full-stack prototypes demonstrating novel approaches to AI memory, context management, and multi-step reasoning
- Designed and implemented meta-learning frameworks for LLMs, exploring systematic knowledge insertion based on cognitive science principles
- Shipped proof-of-concept systems demonstrating autonomous agents capable of planning, reflection, and adaptive behavior
- Developed internal tooling for rapid AI experimentation, including custom prompt management systems and evaluation frameworks
- Explored practical applications of neuroplasticity research to improve AI learning architectures

Founding Software Engineer · SheetRocks · Apr 2021 – Apr 2023

First engineer at seed-stage startup building a web-based spreadsheet application. Owned backend infrastructure, core features, and production deployments.

Stack: Go, React, TypeScript, MongoDB, Redis, AWS, Docker, GitHub Actions

- Built and documented the entire REST API in Go, serving all frontend and calculation endpoints
- Architected NoSQL data layer using Redis for real-time cell updates and MongoDB for user/workspace metadata
- Owned blue-green deployment pipeline to AWS EC2, including automated health checks and rollback procedures
- Extended the calculation engine in Go: built sorting algorithms, formula range selection, and cross-sheet reference system
- Shipped macro system from scratch enabling sandboxed Python execution via Docker containers
- Optimized React rendering for 100k+ cell spreadsheets using virtual scrolling and granular state updates
- Managed full release cycle: code review, staging verification, production deployment, and on-call support
- Responded to customer issues directly, debugged production problems, and shipped fixes within hours

Freelance Software Engineer · Oct 2020 – Apr 2021

Transitioned into software engineering through self-directed learning and client work.

- Built and deployed custom web applications using Go, JavaScript, and AWS (EC2, S3, CloudFront)
- Developed automated web scrapers with custom DSL for real-time inventory monitoring during supply chain disruptions
- Created financial market monitoring system for client: real-time data aggregation, alert triggers, and Discord integration
- Shipped portfolio site demonstrating full-stack capabilities and cloud deployment experience
- Worked directly with clients to translate business requirements into technical solutions

Technical Skills

- **Languages:** Go, TypeScript, JavaScript, Python, Elixir (learning), SQL
- **Frontend:** React, HTML/CSS, Alpine.js, responsive design
- **Backend:** REST APIs, Node.js, Go standard library, Docker
- **Databases:** MongoDB, Redis, PostgreSQL
- **Cloud & DevOps:** AWS (EC2, S3, Lambda), Vercel, CI/CD, bash scripting
- **AI/ML:** OpenAI/Anthropic APIs, prompt engineering, RAG systems, vector databases
- **Tools:** Git/GitHub, Linux, vim, Jest

What I Bring

- **Founding engineer mindset:** I think like an owner. I ship features that move the business forward, not just code that works.
 - **Customer-first approach:** I've worked on-call, debugged production issues at 2am, and talked directly with frustrated users. I know what it means to build for real people.
 - **High agency:** If something needs to happen, I figure it out. No hand-holding required.
 - **Systems thinking:** I connect dots across technical systems, user needs, and business constraints. I can both zoom out to see the whole picture, and zoom in on fine detail.
 - **Rapid execution:** I prototype fast, validate assumptions, and iterate. Weeks of planning < days of building.
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Prior Experience: AT&T (Wire Tech & Sales, 2017–2020) · Various technical sales roles (2011–2017)