Siarhei Holub

Staff Software Engineer, AI · San Francisco Bay Area
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Eight years at Prosper, building and running the backend of a lending platform that has funded $28B in loans. I tend to build tools before they're asked for: an autonomous coding agent before Claude Code existed, and an open-source AI debugging tool that has saved me and other engineers weeks of debugging time.

EXPERIENCE

Prosper Marketplace, San Francisco, CA

Peer-to-peer lending marketplace; 2M+ people funded over 20 years.

Staff Software Engineer May 2026 – present

- Building an agentic system that reviews customer support calls and tickets for compliance: it reads transcripts and account data and decides case merit, issue type and category. It is designed to do a full day of manual review in a two-hour nightly run, with more consistent labels.
- The rest of the job: backend and frontend features, incident response, keeping the platform healthy.

Staff Software Engineer in Test Sep 2022 – May 2026

- Built an autonomous coding agent before Claude Code existed: Claude (Anthropic SDK) orchestrating sub-agents, Aider and a shell. Given a task, it checked out the repo, made the changes, ran the tests and committed. We used it for framework upgrades and security fixes. Not perfect, but it shipped real work.
- Built anomaly detection on public-endpoint telemetry that flags unusual traffic early.
- Drove company-level objectives to pay down tech debt and close out long-standing platform problems.
- Ran proofs of concept, demos and hands-on training to help engineers use GenAI tools in everyday work.
- Security Champion: found and fixed vulnerabilities and added third-party scanners to the pipeline.

Senior Software Developer in Test Mar 2020 – Sep 2022

- Built the observability and debugging system engineers used for production troubleshooting.
- Prototyped TensorFlow models for early loan-default prediction and a graph database for fraud detection. Outside my role, but worth doing.
- Interviewed, mentored and trained engineers; owned projects from design review to release.

Software Developer in Test Jun 2018 – Mar 2020

- Owned projects end to end, from design review and test planning to UI and API automation and release, and replaced manual QA workflows with automation.

BUILT ON MY OWN TIME

Tracer: proactive AI debugging and incident response github.com/sholub-dev/tracer

- Watches production through monitors on New Relic, PostHog and Google Cloud. When one fires, it investigates on its own, posts the likely root cause to Slack, closes the New Relic issue once the problem has stopped, and pings a person when it hasn't.
- It has saved me and several other engineers weeks of debugging time.
- You can also ask it directly what broke. It runs on desktop and iPhone, keeps data encrypted on your own machine, and has a CLI so other agents, including Claude Code, can drive it.

fctr: coding agents in sandboxes In development, open source soon

- Runs coding agents in sandboxes against a goal, and checks the result with tests the agent cannot see.

Also on my own time: a gaming-news aggregator with RAG and semantic search, a digital-downloads shop on Cloudflare Workers, an agentic iOS education app, and a tower defense game for iPhone.

SKILLS

Languages: Python (primary), TypeScript and JavaScript, Java, SQL and NoSQL
AI and LLMs: Anthropic SDK, AI SDK, LangChain; agent orchestration, sub-agents, tool calling, RAG, semantic search
Cloud: GCP: Agent Platform, BigQuery, Firestore, Spanner, Cloud Run, Cloud Functions, Cloud Storage, CDN. Cloudflare Workers, D1, R2
Observability: New Relic, Splunk, PostHog; incident response; fraud and anomaly detection
Testing and tooling: API automation, Playwright, Selenium, JUnit, TestNG, JMeter, Docker, CI/CD, React (basic)

EDUCATION

M.S., Electrical and Electronics Engineering, Belarusian State University of Informatics and Radioelectronics (BSUIR), 2016.
Languages: English, Russian.