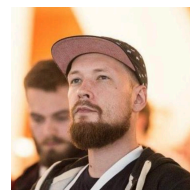


# Sergey Rubanov

Software Engineer - AI Agent Runtimes, Web Runtimes & Developer Tools

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## Professional summary

Software Engineer focused on AI and web runtimes, building reliable agent runtimes and observability pipelines that surface runtime quality signals and regression alerts. Contributed to language standards and tooling, shaping JavaScript semantics and cross-engine tests to improve developer experience. Aims to advance runtime reliability and developer productivity in large-scale web platforms.

## Core skills

### AI / LLM systems

Agent orchestration, prompt/tool flows, model routing, eval & quality-regression checks, OpenAI-compatible API, Anthropic API, llama.cpp-compatible runtimes, MCP/ACP

### Runtimes / standards

ECMA-262, TC39, Test262, WebAssembly, JavaScriptCore, WebKit, browser/webview runtimes

### Languages

TypeScript, Go, C++, Zig

### Platform / observability

OpenTelemetry, traces/metrics/logs, Prometheus, Grafana, OTEL Collector; Docker, Kubernetes, Terraform, AWS, GCP, Cloudflare

## Selected Projects

### Hecate — open-source AI gateway and agent-task runtime

<https://github.com/hecatehq/hecate>

Built an open-source local-first AI gateway and coding-agent console for routing OpenAI/Anthropic-compatible traffic across cloud and local models. Supports supervised external-agent sessions, task-backed agent runs, approvals, artifacts, MCP/ACP flows, provider diagnostics, usage/cost tracking, and OpenTelemetry.

**Tech:** Go, TypeScript, React, Tauri, OpenTelemetry, SQLite, MCP/ACP, OpenAI/Anthropic-compatible APIs.

### Cynic — strict-only ECMAScript engine in Zig

<https://github.com/chicoxyzzy/cynic>

Built a strict-only ECMAScript engine in Zig for non-browser hosts such as edge runtimes, Workers, and server-side JS. Implemented parser/runtime pieces, bytecode-interpreter work, JIT - not yet (TBD), Test262-oriented conformance workflow, and runtime internals.

**Tech:** Zig, ECMAScript, Test262, compiler/runtime architecture.

## Links

Personal website: [sergeyworks](https://sergeyworks.com)

GitHub: [github.com](https://github.com)

LinkedIn: [linkedin.com](https://www.linkedin.com)

BlueSky: [sergeyworks](https://sergeyworks.com)

Twitter/X: [x.com](https://x.com)

## Employment history

SEP 2025 – PRESENT

BARCELONA

### Independent Software Engineer / Consultant

AI runtimes, web platform standards, developer tools, observability, and open-source runtime projects.

- Build AI/runtime and developer-tooling systems across LLM gateways, agent-task runtimes, web standards, JavaScript runtime internals, and observability.
- Design operator-facing reliability controls for agent systems: provider health/readiness, route diagnostics, trace links, usage/cost visibility, policy boundaries, approvals, and sandbox-aware execution.
- Contribute to TC39/ECMA-262 and Test262 by analyzing proposal trade-offs, refining specification text and semantics, and collaborating with contributors from browser vendors, JavaScript engines, and the broader standards community.
- Work independently in ambiguous, research-heavy spaces: turn loosely defined agent/runtime ideas into usable tools, documentation, release paths, and test loops.

MAY 2019 – PRESENT

### Invited Expert, TC39

- Co-authored the Promise.any proposal and contributed editorial improvements to ECMA-262.
- Participate in proposal discussions, evaluate compatibility and ergonomics trade-offs, and develop Test262 tests to validate JavaScript behavior across engines.

MAY 2024 – MAY 2025

US, REMOTE

### Software Engineer, Firetiger

Joined Firetiger after the acquisition of Dispatch.run; initially spent four months at Dispatch.run.

Dispatch.run:

- owned the CLI for the Durable Functions platform, improving developer experience and local-to-cloud workflow reliability.
- researched deployment approaches for running Go code through WebAssembly on Cloudflare.

Firetiger:

- contributed to the telemetry product across core features, infrastructure, and OpenTelemetry compatibility.
- supported early customers through onboarding, troubleshooting, integrations in Python/TypeScript, Vercel support, and Kubernetes/Terraform deployment workflows.

Stack: Go, Python, TypeScript, Node, Next.js, Vercel, Docker, Kubernetes, Terraform, AWS / GCP / Cloudflare, OpenTelemetry / Prometheus / Grafana / OTel Collector

MAR 2022 – JAN 2024

US, REMOTE

### Software Engineer, Socket Supply Co

- Developed core Socket Runtime components in C++ to improve execution stability and platform behavior.
- Enhanced JavaScript APIs for Node.js compatibility and native capabilities across mobile and desktop runtimes.
- Built tooling to streamline developer workflows and reduce setup friction.

Stack: C++ / C / Objective-C++, JavaScript / TypeScript, Node.js, WebKit- and Chromium-based webviews: WKWebView, libwebkit2gtk, WebView2

DEC 2019 – SEP 2021

GENEVA, REMOTE

### Software Engineer, RealAdvisor

- Developed a multi-tenant CRM and a custom document editor with layout templates to reduce manual formatting effort.
- Optimized the document rendering pipeline to improve load times and editor responsiveness.

Stack: React / Svelte, Flow, Node.js, Relay, Docker + Composer, Headless Chromium, GCP

DEC 2014 – AUG 2019

MALTA, REMOTE

### Frontend Developer Lead, EXANTE

- Led development of a web trading terminal, Chrome extension, Ledger hardware-wallet applications, and web3/cryptocurrency projects.
- Mentored and interviewed web developers while leading delivery across React/Preact, TypeScript, RxJS, D3, Redux/MobX, and browser-extension work.

Stack: React/Preact, Redux/MobX, RxJS, D3, TypeScript, C

OCT 2013 – NOV 2014

MOSCOW, RUSSIA

### **Senior Developer, NPTV**

- Built a React-Native-like JavaScript SDK for an interactive TV platform; helped adopt SpiderMonkey and later migrate to V8.
- Managed build systems, DevTools extensions, and R&D for client applications.

Stack: JavaScript, Babel, React, Chrome DevTools extensions

SEP 2012 – JUL 2013

MOSCOW, RUSSIA

### **Frontend Team Lead, KM Media**

- Led frontend team to deliver frontend for an advertising platform.
- Established unit testing with Karma and Jasmine to reduce frontend defects and regression frequency.
- Coordinated with backend and product teams to resolve integration issues and improve data accuracy.

Stack: Angular, JavaScript

SEP 2009 – JUL 2013

ORYOL, RUSSIA

### **Senior Developer, Comfortel**

- Built a CRM-like system with integrations for call center software (Genesys Agent Desktop, Oktell).
- Promoted to Team Lead in 2012. Led a team to implement a CRM system, enhancing client interactions and driving measurable improvements.
- Developed a dynamic web-based operator script generator, streamlining call center operations and reducing response times significantly.
- Managed and optimized databases (MySQL, MSSQL, Oracle), ensuring data integrity and enhancing system performance for critical business applications.

Stack: PHP, JavaScript, MSSQL, MySQL, OracleDB

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## **Education**

2009

ORYOL, RUSSIA

### **Master of Computer Science, Oryol State Technical University**

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## **Languages**

**Russian** (Native), **English** (Proficient), **Spanish** (Novice)