



Martin Kavík

Senior Product Engineer

Fullstack · Rust/Wasm · Product

Prague, Czech Republic

Remote-friendly · Norway relocation

CONTACT

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STACK OVER TIME

CODE

Rust | TS | JS | C# | C | C++

Elm | Elixir | PHP

CoffeeScript

FRONTEND

Seed | MoonZoon | wasm-bindgen

Sass | Tailwind | jQuery

Angular | Astro | Jest

Playwright

SYSTEMS & RUNTIME

Wasmtime | Tauri | Actix | FPGA

WebAssembly | WebGPU | Atmel

DATA & APIS

WebSockets | SSE | Swagger

ElasticSearch | GraphQL

PostgreSQL | SurrealDB

DESIGN

Figma | Penpot | Affinity

Rhino3D

INFRA & TOOLS

Hetzner | Cloudflare | Coolify

FusionAuth | Better Stack | JJ

RealFaviconGenerator

Criterion.rs

EDUCATION

Self-taught Developer

Programming since age 13 (2006). 15+ years of professional software development across web, systems, and hardware.

LANGUAGES

Czech — Native

English — Fluent

Norwegian — Learning

TRAITS

INTJ-A | Product-minded

Systematic | Proactive

Empathetic | Unoffendable

"I'm not hired to write code — I'm hired to help you with your product."

PROFILE

Senior product engineer with 15+ years of experience turning business needs into shipped software across web products, developer tools, and Rust/WebAssembly systems.

- **Product to code:** clarify goals, design practical UX/API, and ship production software.
- **Technical depth:** frontend architecture, fullstack Rust/Wasm, real-time systems, and developer tools.
- **Startup ownership:** comfortable with ambiguous constraints, small teams, and broad responsibility.

EXPERIENCE

Freelance Product Engineer & Open-Source Developer

2019 – Present

Freelance — clients from Norway, Bulgaria, Netherlands, Czechia, South Africa

- Built **MoonZoon** — fullstack Rust/Wasm framework with signals-based UI, typed frontend-backend messaging, and real-time SSE transport. Foundation for a Norwegian university bachelor thesis. 1.8k GitHub stars.
- Developed **NovyWave** — cross-platform waveform viewer using WebAssembly + Tauri with plugin architecture via Wasmtime. Funded by NLnet Foundation.
- Created **LocalSearch** — client-side Wasm full-text search library indexing 20,000 entries in milliseconds to improve UX and reduce backend load.
- Maintained **Seed** — Rust/Wasm web framework (3.8k GitHub stars) before creating MoonZoon.
- Designed UIs in Figma/Penpot, taught Rust, audited smart contracts, and worked in Shape Up-style 4–6 week cycles with demos and progress reports.

Software Developer

2017 – 2019

Applifting · PragueBest · Quichesoft — Prague

- Bank developer portal (Applifting), e-commerce sites (PragueBest), Go test framework improvements (Quichesoft).

Software Developer, CTO

2013 – 2016

Digital Wizards Group s.r.o. — Ostrava, Czechia

- Development, mentoring, and communication with clients across multiple projects, including **MasterCard Dělovka** (for McCann Prague) — live-streamed football cannon controlled by Facebook users. C#, PHP, Facebook API, Atmel microcontroller. 1.2M viewers, Effie award.

Software Developer

2011 – 2013

Neat Solutions, s.r.o. — Ostrava, Czechia

- Built a PHP + JS framework and CMS from scratch.

KEY OPEN-SOURCE PROJECTS

Boon WIP

Declarative language with a Rust runtime, persistent state, and a visual debugger — exploring one language for web apps, CLIs, and hardware.

MoonZoon

Fullstack Rust/Wasm framework — signals instead of Virtual DOM, actor-based sessions, typed messages, SSE transport, and Web Worker experiments.

NovyWave NLnet

Modern waveform viewer — Wasm + Tauri, plugin architecture via Wasmtime/WIT, cross-platform desktop/browser direction.

Prompter

AI agent supervisor — Rust CLI wrapping tools like Codex or Claude Code in a PTY with Axum/HTMX web dashboard.

LocalSearch

Browser-side Rust/Wasm full-text search and autocomplete — fast product UX without extra backend round-trips.

UI Parser WIP

Browser extension and tooling to extract UI metadata for recreation, visual testing, and better developer feedback loops.

Seed 3.8k stars

Elm-inspired Rust/Wasm web framework — TEA architecture, virtual DOM diffing, typed routing. ~400k crates.io downloads.

WHAT I BRING

I work well when I'm given the problem and responsibility for figuring out the path. I communicate tradeoffs, surface risks early, and keep moving without micromanagement. I'm also interested in hardware-adjacent and FPGA development.