

DAVID PORKKA

SENIOR ENGINEER

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SUMMARY

Senior engineer specializing in distributed systems, AI infrastructure, developer platforms, and large-scale geospatial applications. Experienced designing production SaaS systems from cloud architecture and databases through frontend apps and developer tooling.

SELECTED ACHIEVEMENTS

- Shipped 60+ production websites and applications
 - Designed platforms serving 100,000+ mapped assets
 - Reduced mapping infrastructure costs by 80% and improved performance by 4x
 - Created a programming language and runtime in Rust designed for durable agentic workflows
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RELEVANT EXPERIENCE

Senior Engineer | Co-Founder — Dymaxion Ventures (Software Portfolio) *Sept 2017 - Present*

AI Build Coach — Turns a rough idea into a software development plan build.davidporkka.com

- Developed an automated engineering specification engine that generates comprehensive system architectures (PRDs, database schemas, and application flows) via LLM orchestration

Nulang Language — Distributed actor-based runtime and language github.com/dporkka/nulang

- Designed and implemented a distributed programming language and runtime in Rust featuring a register-based virtual machine, Cranelift JIT compilation, and durable workflows for AI agents
- Includes: Erlang-inspired actor-model, type safety, Python and WASM compatibility

Boardzie — One of the largest outdoor advertising marketplaces in the U.S. boardzie.com

- Refactored backend to Fastify and replaced Google Maps with Maplibre GL to 4x backend speed
- Mapped over 100,000 outdoor advertising locations in the United States

Websyt — Enter a URL and get a comprehensive website audit websyt.dev

- Analyzes SEO, Performance, Accessibility, Security, Design, and Technical scores
 - Developed an LLM-based visual design analysis system with GPT-4 Vision, Claude, and Gemini APIs
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Adacavo — Multi-tenant enterprise SaaS outdoor advertising platform app.adacavo.com •
Built to help billboard owners manage their inventory, campaigns, bookings, and field operations

- Designed an event-driven platform architecture using NATS JetStream and asynchronous worker services supporting AI inference, document generation, and data processing.
- Integrated a voice-driven workflow system using Livekit that can update the CRM and perform user actions, and work alongside the Telenyx telephony integration using WebRTC.

Tech Lead — SignValue.com *Feb 2025 - May 2026 (Remote)*
Designed and developed map.signvalue.com for one of the largest U.S. outdoor advertising brokers.

- Architected a high-performance geospatial pipeline using Mapbox Vector Tiles (MVT) to render 28k+ dynamic locations with sub-second latency, driving a 7x ROI for the brokerage platform.

Senior Developer — StartingGateMarketing.com *Dec 2023 - Feb 2025 (Remote)*

- Worked with cybersecurity firms, local governments, and small business owners to deliver consulting, custom code integrations, and web development services
- Led development team; delivered projects 20% faster by standardizing workflows

SKILLS

Languages: TypeScript, JavaScript, Python, Go, Rust, HTML

Frameworks: Next.js, Node.js, Express.js, Fastify.js, React, FastAPI

Infrastructure: GCP, AWS, Azure, Fly.io, Replit, Terraform, Temporal, NATS, RabbitMQ, CI/CD

Databases: PostgreSQL, MongoDB, SQL, SQLite, Neon, Supabase

AI: LLM integrations, AI agents, MCP, RAG, vector databases, workflow automation, STT, TTS

Developer Tools: Cursor, Codex, Claude Code, Github Copilot, Github, Docker, Kubernetes

Testing / QA: Playwright, Jest, Pytest, Vitest, Husky, Biome, GitHub Actions, Sentry, Posthog

Geospatial: Mapbox, MapLibre GL, Google Maps APIs, GeoJSON, PostGIS, MVT

Core Competencies: Distributed Systems, Platform Engineering, System Design, AI Infrastructure

Human Languages: English (Native), Portuguese (B2 Level), Spanish (B1 Level), Mandarin (A2 Level)

EDUCATION

Bachelor of Science, Biology — University of Wisconsin–Madison

2017 Graduate
