



FIELDING JOHNSTON
Senior Software Engineer with AI and Systems Expertise

CONTACT

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PROFILE

A versatile full-stack software engineer with 15+ years of experience building scalable AI infrastructure, distributed systems, and interactive applications. Led development of a 120k-model inference framework handling 2M requests in a single day and a layer 1 blockchain at Nesa. Developed AI-driven NPC systems for a Unity-based game. Contributor to open source projects like xFusers and nats.py. Passionate about democratizing AI through scalable, decentralized solutions.

EXPERIENCE

[2023-Present] NESA
Vice President of Engineering

- Architected a distributed inference framework for 120,000 models, handling up to 2M requests per day on heterogeneous hardware.
- Designed and implemented Nesa's layer 1 blockchain for decentralized AI compute.
- Built telemetry pipeline using NATS.io and Prometheus to monitor nodes.
- Led secure containerization for user-submitted models.
- Contributed to equivariant encryption (EE) achieving zero-latency private inference.
- Developed reinforcement learning system for dynamic model assignment.
- Contributed to open-source: xFusers and nats.py stability improvements.

Skills: Python, CUDA, NATS.io, Prometheus, Docker, blockchain, distributed systems, tensor/sequence parallelism, PyTorch, LangChain, LLMs, Hugging Face, RLHF, TypeScript, Bash, Git, Linux

[2022-2023] OPESSKY
Lead Software Engineer & Director of Design and Development

- Led Unity-based lunar colony simulation game development.

- Designed and implemented 3D environments and shaders.
- Built AI systems for dynamic NPCs with procedural behaviors.
- Directed art team and coordinated UI/UX integration.

Skills: Unity, C#, 3D programming, shader programming (GLSL), AI (NPC behavior), game design, JavaScript, project leadership

[2020-2022] VIDY

Lead Frontend Engineer (2020-2022)

- Refactored to Svelte, improving performance for 14M+ monthly users.
- Built components for scalable real-time video and data applications.
- Developed custodial wallet system for user transactions.
- Implemented NLP for ad placement to boost engagement.

Senior Software Engineer (2019-2020)

- Built scalable APIs and web apps for real-time video.
- Led adoption of modern JS frameworks.
- Engineered fine-grained reactive vanilla JS framework.

Skills: JavaScript (ESNext), Svelte, TypeScript, React, HTML, CSS, Rollup, PostCSS, Git, API development, NLP

[2009-2019] JUSTFIELDING

Founder and Software Engineer

- Built and scaled web apps integrating React and Three.js.
- Advocated open-source frameworks to reduce tech debt.
- Managed technical, design, and business operations.

Skills: JavaScript (ESNext), React, Three.js, RxJS, HTML, CSS, Webpack, Node.js, C++, Nginx, Redis, Git, Docker

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