



# Nicolas Epstein

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[GitHub](#) • [LinkedIn](#) • [Website](#) • [Freelance](#)

## PROFESSIONAL SUMMARY

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Pragmatic full-stack engineer with a backend focus and a track record of owning architecture, migrations, and performance-critical systems. I design robust APIs, lead cross-functional projects, and improve developer velocity. Strong in SQL, TypeScript, Python, and cloud infrastructure. Comfortable wearing DevOps, product, and mentorship hats when needed.

## SKILLS

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Programming:	Python, TypeScript, SQL, Rust, Go, HTML, CSS, Bash
Frameworks & Tools:	PostgreSQL, Node, Django, Express, React, Git
DevOps:	CI/CD, Docker, Kubernetes, GitHub Actions, AWS
Soft Skills:	Autonomy, versatility, eagerness to learn, teamwork, problem-solving

## EXPERIENCE

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**Senior Software Engineer**, Normal VR, NYC (remote), Feb. 2024 – Mar. 2025

- Led the architecture and implementation of a full-stack portal for subscription, billing, and traffic monitoring
- Migrated data from Firestore to PostgreSQL with zero downtime and 5× performance improvement
- Designed REST APIs with OpenAPI specs to support code generation and self-documentation
- Tuned query performance using raw SQL, indexing, and transaction isolation tuning
- Built RBAC middleware and implemented JWT-based authentication with MFA
- Automated testing and deployment pipelines with GitHub Actions
- Streamlined team velocity by introducing a stacked diff workflow for PRs
- Stack: TypeScript, Node, Hono.js, React, PostgreSQL, Docker, K8s, OpenAPI

**Software Engineer**, Quebec Blue Cross, Montreal (remote), May 2022 – Jan. 2024

- Developed a real-time dashboard for CI/CD and cluster observability using WebSockets
- Modernized a 30,000+ line legacy Python codebase with type hints and Pydantic data models
- Designed a secure frontend auth flow with Microsoft Identity Platform SSO
- Integrated OpenAPI for contract-driven development and automated client generation
- Used Redis to cache API responses and improve performance
- Mentored an intern on TypeScript and React best practices
- Stack: Python, FastAPI, Typescript, React, Redis, Docker, K8s, OpenAPI



**Software Engineer**, Norwegian Refugee Council, Berlin (remote), June 2020 – Apr. 2022

- Co-designed and built a workflow engine for a humanitarian case management platform
- Shipped UI components in sync with designers using Storybook
- Profiled Go services to identify memory leaks and optimize CPU usage
- Maintained a cross-platform React Native port for mobile field deployment
- Coordinated directly with stakeholders across three continents to gather feedback
- Stack: Go, TypeScript, React, React Native

**Freelance Developer**, Positron, Montreal, May 2019 – Present

- Worked with artists and researchers to create interactive visual tools and surveys with 5,000+ users
- Wrote a Rust tool to convert survey data into 3D geometries
- Delivered custom interactive visualizations using D3.js and Three.js
- Stack: TypeScript, React, D3.js, Three.js, Rust, Django, Express, PostgreSQL

## PERSONAL PROJECTS

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**Jx** – [github.com/sqwxl/jx](https://github.com/sqwxl/jx)

A terminal-based CLI tool for exploring large JSON documents. Written in Rust for performance and type safety.

**Harfang** – [github.com/sqwxl/harfang](https://github.com/sqwxl/harfang)

A discussion platform that demonstrates the viability of a hypermedia-driven architecture for building interactive, stateful web apps with minimal client-side logic. Built with Django and HTMX.

### 8-bit Computer

A DIY hardware build showcasing fundamental computing concepts using basic electronic components.

## EDUCATION

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**Harvard University** – Computer Science Certificate, 2020

**Université de Montréal** – BA Philosophy, 2009