PIOTR SZARAN

Email | GitHub | Portfolio Website

Full-Stack Software Engineer with experience building production applications and **AI**-enabled systems across the **TypeScript**, **React**, and **Node.js** ecosystems. Experienced with **REST APIs**, **relational databases**, **Docker**, **CI/CD**, observability, **infrastructure**, and **MCP**-based integrations.

TECHNICAL SKILLS

Languages & Application Development

- TypeScript, JavaScript, Python, PHP, SQL, PowerShell, Go
- React, Astro, Next.js, Node.js, Express, Hono, Tailwind CSS

Backend, Data & Integration

- REST APIs, OAuth 2.0/OIDC, JWT, MCP
- PostgreSQL, MariaDB, MySQL, SQLite, Prisma, Drizzle ORM

DevOps & Infrastructure

- Git, GitHub, GitHub Actions, Docker, Docker Compose, PM2
- Linux/Debian, Caddy, Cloudflare, Tailscale, CI/CD, Vercel

AI & Agentic Development

- MCP, LLM integration, agentic workflows, prompt engineering, human-in-the-loop validation

WORK EXPERIENCE

Judicial IT Officer (Software Developer)

***Judicial Information Technology Office*, Ministry of the Attorney General,** May 2025 – Present

- Architected a full-stack hardware asset management platform (React, TypeScript) managing end-to-end purchasing and return workflows, featuring role-based access control, transactional integrity, automated database backups, and CI/CD pipelines.
- Digitized the Network Access Request process through a custom WordPress plugin featuring conditional forms, Microsoft 365 autofill, notifications, searchable records, and audit-ready exports.
- Engineered and deployed a help-desk intake application (PowerShell, WPF) across 2,600+ endpoint computers, replacing static email reporting with automated system diagnostics, input validation, file attachments, and guided ticket creation.

Freelance Web Developer

***Self-Employed*,** January 2025 – Present

- Next Level Therapy: Migrated a clinic website from Squarespace to a code-owned Next.js application, reducing recurring platform costs and integrating Resend, Google Places reviews, and Setmore/Square booking workflows.
- Council of Support for Polish Studies for the University of Toronto: Delivered a responsive bilingual platform using Next.js, TypeScript, Sanity CMS, and i18n, enabling client-managed English and Polish content after handover.

Asset and Fleet Coordinator

***Animal Welfare Services*, Ministry of the Solicitor General,** January 2023 – May 2025

- Supported the rollout of an enterprise asset-management platform and developed Python automation for data migration and inventory workflows.

PROJECTS

Pior Labs - Developer Platform — Docker, PostgreSQL, OAuth 2.0/OIDC, Caddy, Terraform, GitHub Actions

- Architected and operate a self-hosted Internal Developer Platform (IDP) for independently deployed applications and shared services, centralizing OIDC SSO and OAuth 2.0 authorization, private Tailscale access, Docker networking, shared PostgreSQL infrastructure, and Caddy reverse-proxy routing and TLS.
- Standardized application bootstrapping and reduced configuration drift through a reusable React/Hono/Drizzle template, versioned design system, idempotent PostgreSQL database and role provisioning, Terraform-managed Cloudflare DNS, Docker Compose, and GitHub Actions CI/CD with repository-scoped self-hosted runners.

Pior Labs - Cookbook Recipe Tracker — React/TypeScript, Hono/Node.js, PostgreSQL/Drizzle, MCP, LLM Integration

- Built and deployed a self-hosted recipe and meal-planning application on the Pior Labs platform, reusing centralized OIDC SSO, shared PostgreSQL infrastructure, containerized deployment, and reusable application tooling.
- Integrated AI-assisted recipe workflows and MCP-based tools, allowing external AI assistants to create, query, and manage recipes and meal plans through structured application interfaces.

Personal Wedding Website — Next.js, Supabase, Resend, Sentry, i18n

- Designed, launched, and operated a guest-management application for more than 200 guests, including custom RSVP, guest administration, bilingual support, and email broadcasting workflows.
- Maintained 100% uptime with zero recorded production errors throughout the event using Vercel serverless deployment and real-time monitoring with Sentry.

EDUCATION

University of Toronto – *Honours Bachelor of Science,* *2023*

- Major in Statistics, Minors in Computer Science and Mathematics