Michael Pearce

Founder & Lead Developer

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Summary

Self-taught software developer with a strong focus on **full-stack web development, API design, and system architecture**. Creator of **Street Ninja**, a nonprofit initiative leveraging technology to provide real-time assistance to homeless individuals. Passionate about building scalable, impactful applications using **Python, TypeScript, Django, and Next.js**. Seeking a developer role where I can apply my skills to solve meaningful problems.

Technical Skills

- **Languages:** Python, TypeScript, JavaScript, CSS, HTML, C# (beginner)
- **Frameworks & Tools:** Django, Next.js, Tailwind, PostgreSQL, Redis, Celery, Docker
- **Other:** API design, Web scraping, GIS data processing, Cybersecurity (TryHackMe, VulnHub)

Experience

Street Ninja – Founder & Lead Developer *(2024 – Present)*

A nonprofit platform that provides real-time assistance to homeless individuals by aggregating shelter, food, and resource data.

- **Built a full-stack web app** using **Django REST Framework** (backend) and **Next.js** (frontend)
- Designed an **API-first architecture** enabling real-time GIS data processing
- Implemented **Dockerized deployment** with PostgreSQL, Redis, and Celery
- Developed an **SMS-based assistant** using Twilio for resource inquiries

- Optimized performance with **caching, background tasks, and efficient queries**
- Fully open-source and available on [GitHub](#)

Notable Projects

Street Ninja Website – Public Outreach & Interactive Map *(TypeScript, React, TailwindCSS)*

A separate website for government agencies, NGOs, fundraisers, and grant issuers to learn about **Street Ninja** and explore resource locations.

- Built an **interactive map** to visualize **essential city resources**
- Integrated with **Street Ninja's API** for real-time data
- Designed a web-based interface that allows users to **simulate SMS interactions**
- Tailored for **public awareness, funding opportunities, and community engagement**

Powersweep – Windows PrivEsc Toolkit *(Security, PowerShell)*

- Created a **PowerShell module** to automate privilege escalation checks in CTFs
- Implemented reconnaissance scripts for **Active Directory enumeration**

Webweaver – Async Web Scraping Framework *(Python, Playwright, aiohttp)*

- Built a **human-like web scraper** using **Playwright + aiohttp**
- Designed **rotating user agents & session persistence** to evade bot detection

Stegosaurus – Steganography & Encryption *(C#)*

- Developed a **C# steganography tool** for **hiding messages in images** using **LSB encoding**
- Implemented **AES encryption** for added security

Education & Certifications

- **Self-Taught Developer** – Extensive hands-on learning through open-source projects & cybersecurity platforms
- **TryHackMe (Top 1% Rank)** – Completed penetration testing & cybersecurity challenges
- **PyPI Package Maintainer** – Published Python libraries (e.g., `tire_codes`, `canatax`)

Open Source & Community

- Active contributor to open-source projects on GitHub
- Building developer tools, security utilities, and automation scripts

Additional Information

- Open to **remote & local developer roles**
- Passionate about **technology for social good**
- Based in **Vancouver, BC**

Portfolio & Projects: https://michaelpearce.tech