Jason Cameron

EXPERIENCES

Lead Backend Developer

Sep. 2022 - Present

Project Metropolis Toronto, ON

- Optimized Docker build processes reducing average build time from 140s to 80s by caching reused layers
- Automated API documentation generation conforming to OpenAPI 3.1 standards, saving 5 hours monthly per developer
- Streamlined deployment via centralized bash scripts, improving system agility and reducing average downtime by 12%
- Established REST API filters, eliminating wasted API calls by ~30% and decreasing server load by 3% during peak usage
- Designed and implemented polymorphic comments, likes, view counts, and saves, increasing user engagement by 300%

Computer Science Tutor

Dec. 2023 - Present

• Instructed students aged 7-16 in Scratch, Python and basic web development through one-on-one and group lessons. Utilized a blend of interactive exercises and project-based learning to foster understanding.

PROJECTS jasoncameron.dev/#/projects

RedditVideoMakerBot | Python, Reddit, FFmpeg, AWS Polly, Playwright, Web Scraping — May 2022 - Present Automated tool for seamlessly transforming Reddit posts into videos using code, streamlining traditional editing workflows

- Created a simplified configuration GUI, growing the bot to **6,300+** stars on GitHub and **100,000+** downloads
- Enhanced bot's Text-to-Speech (TTS) functionality by reverse engineering the TikTok TTS API, resulting in a **30%** reduction in processing time and a **25%** increase in speech clarity
- Ensured reliable operation of the bot across **10,000+** machines and all major operating systems despite API changes, rate limiting, and copyright issues

<u>Abacus</u> | Golang, Gin, Valkey, Docker, Jsoniter, SSE, JSONP, Linux System Administration − ♠ Apr. 2024 - Present High-performing and lightweight API simplifying numeric tracking and analytics, eliminating custom backend infrastructure

- Scaled the site up to 1.5 million+ requests weekly while maintaining a 100% uptime and 47.0ms median response time
- Reduced infrastructure costs by 35% and increased speeds by 22% utilizing pipelining and optimizing Docker networks

Foodle | *Typescript, Svelte, CSS, Python, Flask, Cloudflare, Google Analytics* — • Aug. 2022 - Present A food-themed twist of Wordle with an additional set of modes and features

• Developed and deployed a high-performance Wordle-inspired game using Svelte, Cloudflare, and GitHub Pages. Grew it to **680,000+** unique visitors and **5,700,000+** page views via user-driven improvements

mCTF | Django, K8s, K3s, Docker, Valkey, PostgreSQL, <u>Nebula</u> − **♠**

Jan. 2024 - Present

A Reusable Jeopardy-style CTF platform written using Django and Kubernetes

• Identified and rewrote critical SQL query reducing time to execute by over **80x** to **97ms** by leveraging precalculated database tables, leading to an over **50x** reduction in avg request time and an overall **60%** increase in user satisfaction

Scavenger Hunt | Python, Django, CSS, JS, OAuth $2.0 - \Box$

Nov 2022-Present

A scavenger hunt platform engineered to prevent cheating or RNG-based finds while ensuring fairness and integrity

• Enabled management of an unlimited number of concurrent scavenger hunts through a robust configuration system, dramatically enhancing platform capacity and scalability

PhysioQuest - Best Use Of MongoDB At JAMHacks 7 | Python, Django, HTML, JS, CSS, OpenCV, MongoDB — Jun. 2023 Gamifying physiotherapy with Al to encourage consistency and accuracy when completing exercises

- Designed and implemented the backend API and database models using Django and Django Rest Framework
- Integrated our CV model to the end user's webcam using Django channels, enabling compatibility with devices globally

FORMAL EDUCATION

William Lyon Mackenzie Collegiate Institute - Toronto, Ontario

• Extracurriculars: School Website (Backend Lead / Vice-President), Competitive/Computer Programming Club (System Administrator), Engineering Club (Tech Lead), School Newspaper (Photographer), A/V Team (Crew Member / Club Liaison)

SKILLS

Languages: Python, Golang, Java, JavaScript/Typescript, Bash, Nim, Processing, HTML, CSS/SCSS

DevOps Tools: Linux, Caddy, Nginx, træfik, Docker, Cloudflare, WireGuard, GitHub Actions

DevTools/Frameworks: Git, IntelliJ, Django, FastAPI, Flask, React, Svelte, Gin, Celery, Postman, Tailscale

Databases: MongoDB, PostgreSQL, SQLite, RocksDB, Redis, Valkey

Productivity and Design Tools: Miro, Notion, Microsoft Suite, Canva, Photoshop, LaTeX