MATTHEW BERGER









SKILLS

Languages: TypeScript, Python, SQL, Bash, HTML, CSS, C/C++

Frameworks: React, Storybook, Flask, Framer Motion, Svelte, Astro, TailwindCSS, Axios, AWS CloudFormation

Developer Tools: Git, Linux, Vim, Figma, Postman

WORK EXPERIENCE

Computer Scientist, Innovation, Science and Economic Development Canada (AI Accelerator Lab)

Jan — Aug 2025

- Refactored intranet-facing AI chatbot frontend into a lightweight **React** application, reducing bundle size from 20MB to 500KB and reducing lines of code by 75%, which delivered faster load times and made future features easier to implement.
- Developed interventions module for a parliamentary committee transcription and summarization tool, leveraging **LLMs** to extract MPs' key lines of questioning and reducing analyst overtime in preparing reports for the Privy Council Office.
- Optimized transcription pipeline by benchmarking libraries and resolving memory bottlenecks, reducing processing time for 2-hour meetings from 45 minutes to 10 minutes

Associate AI Engineer, Spellbook

May — Aug 2024 (Remote)

- Enhanced contract review efficiency by redesigning LLM-based scoring system; fine-tuned **OpenAI** models and tested classifiers using **scikit-learn**, evaluating multiple ML approaches to significantly improve accuracy and reduce review time
- Delivered weekly analytics presentations to product, engineering, and leadership teams, translating insights from **1M**+ user interactions into actionable recommendations, driving alignment with business goals.

Software Developer, Spellbook

Sept — Dec 2023 (Remote)

- Significantly contributed to a complete UI overhaul using **React**, **Typescript**, and **TailwindCSS**, navigating numerous design iterations shared via **Figma**. Completed a complete rewrite within an impressive two-month timeframe.
- Proactively introduced **Framer Motion** to streamline the addition of animations and microinteractions. Emerged as the go-to team member for animation expertise, leveraging in-depth knowledge of the library.
- Spearheaded building complex primitives and atomic components used application-wide, along with comprehensive visual and interactive **Storybook** tests for each.

Full Stack Developer, Tamvoes Health

Jan — April 2023

- Overhauled event and contact sharing platform-wide, using **Pyramid** to build decoupled, single-purpose API endpoints for patients to share data with their doctor. Simplified data sharing for patients and boosting user retention by over 10%.
- Simplified tangled logic and improved code maintainability by refactoring legacy code from **jQuery** and **Handlebars** to **React**.

Full Stack Web Developer, Tradable Bits Media

May — Aug 2022

- Deployed a sales funnel builder to track fan engagement flows, simplifying data analysis and a 25% increase in conversions from previously untapped audiences using **Flask**, **jQuery**, **Python**, and **PostgreSQL**.
- Optimized user experience by leveraging the Facebook Graph API to re-purpose existing ad templates as Facebook posts

PROJECTS

Contactly 「↑ Remix (React Framework), Prisma (ORM), Planetscale, Typescript, Figma, TailwindCSS

- Created a contacts app that reminds you to reach out to your friends and family, leveraging **Twilio SendGrid** for reminder emails, **Amazon S3** for storing profile pictures, and **OAuth 2.0** for easy authentication.
- Wrote custom parsing logic to import contacts from external providers

EDUCATION

University of Waterloo

Sept 2021 — April 2026

Bachelor of Mathematics, Combinatorics and Optimization

Waterloo, ON

ABILITIES & INTERESTS

Languages: Spanish (Native Fluency) - French (Working Proficiency) **Typefaces (Fonts)**: Slab Serif, script, sans serif - I love them all!