

Raymond Tao

Eager sophomore SE student seeking a summer 2024 co-op

🇺🇸 US & Canadian citizen

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Education

McMaster University – Bachelor of Software Engineering

Hamilton, ON / Sept 2022 – Present

- Awarded Engineering Award of Excellence worth \$3000
- Clubs: Intramural Basketball, Water Polo, Chess, Brazilian jiu-jitsu, McMaster Barbell

Experience

Software Engineer – Google Developer Student Design Team

Hamilton, ON / Sept 2023 – Present

- Created a full-stack platform that simplifies the entry into ML of generating custom classification models
- Enhanced algorithm accuracy and addressed overfitting using **PyTorch** for model training
- Constructed **Jenkins pipeline** for **CI**, improving the reliability of **FastAPI** endpoint deployments by **90%** through automated API testing using **Poetry** and **Pytest**
- Authored **Dockerfile** for the frontend containerization, contributed to **GitHub Actions** workflows, and executed scalable deployments with Docker, **Kubernetes** and **Terraform** on **Google Cloud Platform**

IT Systems Intern – Digital Fire

Oakville, ON / Sept 2021 – Feb 2022

- Automated script development for device reformatting and software installation, enhancing efficiency by reducing processing time by **30%** and increasing throughput by 20 devices per hour
- Managed Hyper-V Windows Server environments, data wiping, remote access, and RAID formatting

Projects

FrameOff

- Built a responsive lightweight image-based poll web app using **TypeScript**, **Vite**, and **React**
- Created **REST API** endpoints with **Express** and **MongoDB** data models, integrating **Multer** middleware for image uploads to **AWS S3** while enhancing state management and app performance with **Zustand**
- Designed user-friendly interfaces with **Figma**, **React**, and **TailwindCSS**, and prototyped with **Storybook**

Gotcha Canada

- Created a bubble tea website leveraging **CDN** for Instagram image loading and **Google Maps API**
- Implemented **SSR** and **sitemap** optimization, ensuring mobile-friendly navigation and improved **SEO**
- Post-deployment, site saw a **300%** increase in page views within 24 hours and achieved a **70%** improvement in load times (FCP: 0.61s, LCP: 1.15s, INP: 48ms, FID: 3ms, TTFB: 0.25s)

Personal Library

- Developed a book library app with **TypeScript**, **Next.js**, and **Rust**, integrating user management, cataloging, loan tracking, and reviews; deployed using **PostgreSQL** and **Docker**
- Implemented **CRUD** operations and state management using **React Hooks** to enhance user interactions

Interests

Piano

Royal Conservatory Repertoire Level 9

- Repertoire: Nocturne in E-flat Major, Waltz in C Minor, Prelude in E Minor, Clair de Lune

Powerlifting

- Strength Records: Squat - 395 lb, Bench Press - 285 lb, Deadlift - 485 lb

Skills

Languages: Python, Java, JavaScript/TypeScript, C++, SQL, Rust, HTML/CSS

Libraries: Node.js, Express, React/Next.js, Mongoose.js, TailwindCSS, FastAPI

Technologies: MongoDB, GCP, Kubernetes, Docker, Terraform, AWS S3, PostgreSQL, GitHub Actions, Jenkins