

JIMMY LIU

Dedicated Software Engineer and Student

@jimmy.liu@uwaterloo.ca

ji-mmyliu

jimmyliu.dev

jimmy-liu-8173b4232

EXPERIENCE

Full Stack Software Developer Intern **Royal Bank of Canada** 📅 July 2023 – August 2023

- **Technologies used:** React.js, Golang, MongoDB, PostgreSQL, Apigee, Jest, Jenkins, Backstage, Node.js
- Developed a platform to evaluate **3600+** APIs within RBC to boost and maintain performance, security, and **site reliability**
- Encouraged and aided **850+** developers in improving the quality of their internal APIs

📅 July 2022 – August 2022

- **Technologies used:** Angular.js, Python, FastAPI, PostgreSQL
- Engineered RBC's internal developer rewards system, aimed at elevating team productivity and enhancing problem-solving efficiency company-wide

Lead Frontend Developer **Project Metropolis** 📅 February 2022 – June 2023

- Revitalized the user interface of an official school website using **React.js** and consolidated essential student resources
- Enhanced site functionality and aesthetic appeal. Worked closely with both backend developers and graphic designers to seamlessly integrate student schedules, announcements, and school maps

Full Stack Developer **Freelance** 📅 September 2022 – October 2023

- Designed and built a custom wedding website serving **130+** users
- Managed RSVP forms, automated email sending, and registry checklists using **React.js** and **Django**

Competitive Programming Club Vice President 📅 October 2021 – June 2023

- Prepared and delivered competitive programming and game development lessons for over **150** club members
- Hosted and judged a province-wide hackathon for high school students across Ontario

TECHNICAL KNOWLEDGE

- Programming Languages: Python, Java, C, C++, Golang, Javascript, Typescript, Node.js
- Web Frameworks: HTML, CSS, React.js, Angular.js, Express.js, Flask, FastAPI, Django, Jinja, NGINX, Caddy
- Other Technologies: Tensorflow, Linux, Git, Github, Vim, Jira, Docker, Kubernetes, Jenkins

PROJECTS

Screentime Showdown 🌐 devpost.com/software/screentime-showdown 📅 October 2023

- Won Hack the Valley 2023's Best Financial Hack Award.
- A group competition site that helps people overcome social media addiction
- Made with **React.js**, **Express.js**, and Meta's Instagram API.

Discord Bot Online Judge 🌐 dboy.jimmyliu.dev 📅 March 2021 – Present

- An open-source public competitive programming online judge platform hosting **10** contests, **16** programming languages, over **60** challenges, and over **100** users.
- Developed a Discord Application using **Python**, **MongoDB**, **gRPC**, and an additional **Flask** web frontend.

Laser Guitar 🌐 github.com/ji-mmyliu/laser-guitar 📅 September 2023 – Present

- A compact electric guitar with lasers for strings. Built using **Python**, **Raspberry Pi**, and a **Tensorflow Keras** machine learning model for chord fingering detection.

Wireguard VPN Wizard 🌐 github.com/ji-mmyliu/wg-vpn-onboarder 📅 July 2023 – Present

- Developed an interface in **Golang** that generates and manages personalized Virtual Private Networks (VPNs) utilizing **Wireguard** technology

AWARDS

Carnegie Mellon University picoCTF Capture the Flag Contest **Third Place in Canada**

Canadian Computing Competition **Senior Division Honour Roll (95th percentile)**

EDUCATION

University of Waterloo

Bachelor of Software Engineering Candidate (3.95 GPA) 📅 September 2023 – April 2028