# JIMMY LIU

# **Dedicated Software Engineer and Student**

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🕠 ji-mmyliu

# jimmyliu.dev

in 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
- Guided 850+ developers in maintaining a high standard of quality for 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**

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Ctober 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

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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 (95<sup>th</sup> percentile)

#### **EDUCATION**

#### University of Waterloo

Bachelor of Software Engineering Candidate (3.95 GPA) 📋 September 2023 - April 2028