

Justin Lau

☎ 437-268-7803 | ✉ jlau@uwaterloo.ca | [in linkedin.com/in/jlau04](https://www.linkedin.com/in/jlau04) | github.com/justinscitech | 🌐 jlau.tech

EDUCATION

University of Waterloo

Candidate for Bachelor of Computer Engineering

2022 — Present

TECHNICAL SKILLS

Languages: JavaScript, Python, HTML/CSS, C#, C/C++

Libraries/Frameworks: React, Next, ASP.NET Core, Node.js, Express.js

Developer Tools: Git, MySQL, MongoDB, Azure, GCP, Firebase, Figma, Postman, Vercel, Netlify

EXPERIENCE

Software Engineering Intern

Jan. 2024 — May 2024

SPS Commerce

Brampton, ON

- Incoming 2024 intern working on the PACA software team

Software Developer Intern

May 2023 — Aug. 2023

BCS Automation

Belleville, ON

- Engineered the backend of Canada's VR platform **HoloShip** to simulate ship systems using **digital twins**
- Developed a scalable REST API using ASP.NET Core Web API, covering **20+** endpoints and using CRUD operations for real-time data processing from MySQL databases
- Architected ASP.NET servers to process raw signals using ship system logic, boosting simulation accuracy by **25%**
- Designed MySQL queries on Azure to facilitate storage from **5300+** sensors, enhancing data accessibility
- Implemented plugins to provide apps with utility functions for HTTP requests and automated 3D simulations

Software Engineering Intern

Jun. 2021 — Aug. 2021

HealthSmart Technologies

Mississauga, ON

- Developed an EMR integration website, providing health data access for patients and doctors
- Built 3D patient visualization pages with Three.js and Blender for real-time browser rendering
- Converted Figma mockups into dynamic React webpages, enhancing foot traffic by **33%**

Game Developer

Nov. 2021 — Aug. 2022

Legion Studios

Mississauga, ON

- Led the development of multiplayer games, amassing **12,000 followers**, **100,000 plays**, and **1000+ sales**
- Improved menu designs, animations, and storyline elements, boosting average daily plays by **30%**

PROJECTS

ReadRight — Dyslexia Reading Aid 🌐 | *React, Express, Node, ChakraUI, Firebase, GCP, Cohere API*

- Constructed a reading aid site with AI-generated prompts and voice analysis using React for the frontend & Cohere's LLM API for the prompts, achieving **97%** accuracy in analyzing user reading proficiency
- Implemented Firebase for realtime user authentication & added dynamic login messages with ChakraUI
- Integrated Google Cloud's speech-to-text API via REST endpoints in Express, enabling reading accuracy analysis

IntelliPaint — AI Art Generator 🌐 | *React, MongoDB, Express, Node, Tailwind CSS, OpenAI API*

- Developed an AI art generation site using the OpenAI API to make high-quality art from text prompts
- Created a showcase page with Tailwind CSS and React, enabling users to search and download art
- Built REST endpoints with Express.js to connect to a MongoDB cluster & access images in Cloudinary

DevConnect — Developer Networking Platform 🌐 | *React, Next.js, MongoDB, Express, Node*

- Engineered a Roblox developer networking platform to improve collaboration between studios & developers
- Integrated Roblox's API to provide in-depth analytics on user portfolios, game engagement, & studio revenue
- Anticipated to reach **300+** developers and **30+** game studios with more than **20 million+** game visits

ACHIEVEMENTS

Lighthouse Hacks Organizer - Led one of [the GTA's largest hackathons](#) with 250+ participants & \$40,000+ in prizes

Professional Engineers of Ontario Scholarship - Top 3 Ontario engineering undergraduates

Blockchain Sponsor Award Winner (2x) - Hack The North 2023, Canada's largest hackathon

Best Project Award - Hack The 6ix 2023, Toronto's largest hackathon