THOMAS LUC

(437)-249-4490 \Leftrightarrow tqluc@uwaterloo.ca

linkedin.com/in/thomas-luc \diamond github.com/thom974 \diamond tluc.me

EDUCATION

Candidate for Computer Engineering, University of Waterloo

2022 - 2027

Cumulative GPA: 88.08 / 100

SKILLS

Languages Python, Javascript, C++, HTML/CSS, SQL

Technologies Git, Figma, PostgreSQL, VS Code, Blender, RESTful APIs

Frameworks Node.js, React.js, Express.js, Three.js, anime.js

PROJECTS

Room Designer Bot

Node.js, Express.js, Three.js, Blender, PostgreSQL, RESTful APIs

- Built a bot to display hand-crafted **Blender** furniture models in Discord by developing an **Express.js** server to perform in-browser physics-accurate rendering using **Three.js**.
- Interfaced with Discord API to create over 20 bot commands for user customization and interaction.
- Constructed a relational **PostgreSQL** database to store user data to be accessed by bot and server.

Hackathon Website

Node.js, React.js, Three.js, Figma, Chakra UI, GSAP, Git, Blender

- Prototyped with **Figma** and crafted web animations using **GSAP** library for seamless transitions.
- Leveraged React. is' modularity and used component library Chakra UI for efficient development.
- Forged intricate 3D models in **Blender** and rendered them in real-time to browser using **Three.js**.

osu! Beatmap Generator

Python, Pygame, Selenium, RESTful APIs

- Engineered a video game tool using **Python**, created animated GUI using **Pygame** for enhanced user experience.
- Interfaced with osu! API for services and used **OAuth 2.0** to verify users, while integrating **Selenium** and **WebDriver** to automatically download game files by simulating browser interactions.

EXPERIENCE

President of Programming Club

Iroquois Ridge High School

Sep 2021 - Jun 2022 Oakville, Ontario

- Lead all club operations and gave frequent **Python** programming lessons to over **100** students, teaching data structures (e.g trees and graphs), recursion and dynamic programming.
- Created an extensive curriculum in **Python** to mentor beginner and advanced students on video game design.

Developer and Communications Lead for Hackathon

Iroquois Ridge High School

Aug 2021 - Dec 2021 Oakville, Ontario

- Wrote sponsorship letters to organizations earning a total sponsorship valued \$1000 in cash and merchandise.
- Developed hackathon website attracting hundreds of visitors and over 80 registrations for event.

Main Classroom Assistant

Kumon Institute

Sep 2018 - Sep 2021 Oakville, Ontario

- Spearheaded hundreds of tutoring sessions with Grade 1 12 students teaching arithmetic, algebra and calculus.
- Crafted individualized lesson plans for students while accommodating concerns of students' parents to enhance academic performance.