57 Russell Hill Road
Markham, Ontario, Canada
L6C 2M5

Billy Lee

(437) 224-6179
billy.pl.lee@gmail.com
https://billylee.me

Employment

| **Full Stack Developer** | **University of Waterloo** | **Jan – Apr, Sept – Dec 2023** |

- Developed for a research group led by a professor specializing in figures of speech, focusing on a web platform built using **Next.js** for users to submit and annotate instances of these figures.
- Spearheaded the implementation of advanced features including **Rich Text Support** and dynamic highlighting functionality for annotations.
- Enhanced **page load performance** by 80% through **API call optimization** and implementing **pagination**.
- Engineered and deployed robust backend endpoints for the **Golang**-based REST API.
- Authored comprehensive tests using **Jest** and **React Testing Library** to ensure code integrity and functionality.

| **Software Developer Intern** | **Hewlett Packard Enterprise** | **May – Aug 2023** |

- Developed and launched a **React.js**-based demo portal as the sole developer, effectively showcasing **HPE GreenLake** solutions and streamlining the demo process by at least 50%.
- Orchestrated the automation and optimization of demo processes for a range of HPE solutions, utilizing **Python** and **Bash** scripts, and managed **VMware** vSphere VM environments to ensure efficient and effective demo execution, reducing setup time by approximately 80%.

| **Software Developer Intern** | **Bolee Machine Tool Ltd.** | **Apr – Jun 2023** |

- Tackled the challenge of time-consuming manual product entries on the company's WordPress e-commerce site, previously reliant on a lengthy admin GUI process.
- Revolutionized product management by developing a **Python**-based automation tool using **Selenium** for the company's WordPress e-commerce site; achieved a remarkable 99% reduction in time required, from an estimated 4 months to just 4 hours.
- Managed the company's server system, including configuring the VPN server for remote access and upgrading the storage of the NAS server.

Technical Experience

Projects

- **Instagram Clone** . Developed an Instagram clone using Next.js, TailwindCSS, Express, Firebase Auth, MongoDB, Socket.io, and Node.js, replicating core features such as user registration, profiles, post creation, and real-time chat.
- **Biquadris** . Engineered a customizable Tetris variant in C++, utilizing MVC and Factory Method design patterns for a robust architecture. Created an engaging and user-friendly GUI using the X Window System, with adjustable board dimensions and win conditions.

Education

| **Waterloo, ON Canada** | **University of Waterloo** | **Sept 2020 – Aug 2024** |

- Honours Bachelor of Mathematics - Fourth Year.
- Double Major in Computational Mathematics, and Combinatorics & Optimization. Minor in Computer Science

Skills

- **Languages:** TypeScript, JavaScript, HTML, CSS, Python, C++, Go, Bash, SQL, LaTeX, MATLAB
- **Technologies/Frameworks:** React, Next.js, Socket.io, Node.js, MongoDB, MaterialUI, TailwindCSS, Jest, React Testing Library, Selenium, Git, Linux/Unix.