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Billy Lee

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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

Employment

Lead Developer (Part-time)	**University of Waterloo**	**Starting Jan 2024**

Full Stack Developer (Part-time)	**University of Waterloo**	**Jan – Apr, Sept – Dec 2023**

- Spearheaded the implementation of advanced features including Rich Text Support and dynamic highlighting functionality.
- Innovatively designed and executed responsive Next.js components and pages, leveraging Material UI for optimal user experience.
- Engineered and deployed robust backend endpoints for a Golang-based REST API.
- Authored comprehensive tests using Jest and React Testing Library to ensure code integrity and functionality.

Presales 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.

Computer Technician Intern	**Bolee Machine Tool Ltd.**	**Apr – Jun 2023**

- Revolutionized product management by developing a Python-based automation tool using Selenium for the company's WordPress e-commerce site, slashing 2 months of manual effort 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.

Skills

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