

Markham, Ontario  
Canada

# Billy Lee

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


## Education

<b>Waterloo, ON Canada</b>	<b>University of Waterloo</b>	<b>Sept 2020 – Aug 2024</b>
<ul style="list-style-type: none"><li>• Honours Bachelor of Mathematics. Cumulative GPA: 88.56/100.</li><li>• Double Major: Computational Mathematics, and Combinatorics &amp; Optimization.</li><li>• Minor: Computer Science.</li></ul>		

## Experience


<b>Lead Developer / DevOps Engineer</b>	<b>University of Waterloo</b>	<b>Jan 2024 – May 2024</b>
<ul style="list-style-type: none"><li>• Developed a <b>Next.js</b>-based web platform for a figures of speech research group, enabling user submissions and annotations of figure instances.</li><li>• Revamped the CI/CD process using <b>GitLab pipelines</b>, <b>Docker</b>, and <b>Docker Compose</b>, automating and accelerating testing, building, and deployment phases, and saving over 30 minutes per deployment.</li><li>• Established a robust staging environment to streamline testing and quality assurance, ensuring a more reliable and efficient development workflow.</li><li>• Hosted weekly stand-up meetings, conducted code reviews for merge requests, and set up a documentation site with a CD pipeline to ensure proper project documentation.</li></ul>		

<b>Full Stack Developer</b>	<b>University of Waterloo</b>	<b>Sept 2023 – Dec 2023</b>
<ul style="list-style-type: none"><li>• Spearheaded the implementation of advanced features including rich text support and dynamic highlighting functionality for annotations.</li><li>• Reduced page load time by 80% by consolidating data retrieval to a single API call with server-side props, utilizing <b>Context API</b> for efficient data distribution, and implementing pagination to minimize data overload.</li><li>• Engineered and deployed robust backend endpoints for the <b>Golang</b>-based REST API with MySQL database.</li><li>• Authored comprehensive tests using <b>Jest</b> and <b>React Testing Library</b> to ensure code integrity and functionality.</li></ul>		

<b>Software Developer Intern</b>	<b>Hewlett Packard Enterprise</b>	<b>May 2023 – Aug 2023</b>
<ul style="list-style-type: none"><li>• Developed and launched a <b>React.js</b>-based demo portal as the sole developer, effectively showcasing HPE GreenLake solutions and streamlining the demo process by at least 50%.</li><li>• Orchestrated the automation and optimization of demo processes, utilizing <b>Python</b> and <b>Bash</b> scripts, and managed VM environments to ensure efficient and effective demo execution, reducing setup time by approximately 80%.</li></ul>		

<b>Software Developer Intern</b>	<b>Bolee Machine Tool Ltd.</b>	<b>Apr 2023 – May 2023</b>
<ul style="list-style-type: none"><li>• 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.</li><li>• Revolutionized product management by developing a <b>Python</b>-based automation tool using <b>Selenium</b> for the company's WordPress e-commerce site; achieved a remarkable 99% reduction in time required for bulk price updates.</li><li>• Managed the company's server system by configuring the VPN server and upgrading the storage of the NAS server.</li></ul>		

## Projects

- **Instagram Clone** . Developed an Instagram clone using Next.js, TailwindCSS, Express.js, MongoDB, Socket.io, and Node.js, replicating core features such as user registration, profiles, post creation, and real-time chat.

## Skills

- **Languages:** TypeScript, JavaScript, HTML, CSS, Python, C++, Go, Bash, SQL, LaTeX, MATLAB
- **Technologies/Frameworks:** React, Next.js, Socket.io, Node.js, Express.js, MongoDB, PostgreSQL, MySQL, TailwindCSS, Docker, Github Actions, GitLab CI/CD pipelines, Jest, React Testing Library, Selenium, Git, Linux/Unix.