Youngwoo Lee

647-920-2979 | y288lee@uwaterloo.ca | /in/youngwoo-lee | github.com/youngwoo206 | youngwoo-lee.netlify

EDUCATION

University of Waterloo   Apr. 2025 (Expected)
Bachelor of Engineering
- **Relevant Courses**: Data Structures and Algorithms, Numerical Methods for Process Analysis

EXPERIENCE

Front-End Developer Intern   Sep. 2022 - Dec. 2022
Dream Suites   Toronto, ON
- Designed and developed Dream Suites main website from the ground up using **Vue.js** and WordPress frameworks
- Enabled users to book directly from the hotel website by integrating the Hostaway hotel management software **REST API** into a custom **JavaScript** widget, boosting booking volume by 15%
- Developed custom components using **HTML** and **CSS** to increase mobile friendliness over preexisting templates

Engineering Intern   Sep. 2021 - Dec. 2021
Nissan Canada   Toronto, ON
- Streamlined vehicle allocation tasks by developing **VBA macros** to automate vehicle allocation tasks, reducing working hours spent on tasks by an average of 45 min while significantly reducing chance of human error
- Used **Python** PyXll library to automate Excel report generation, eliminating an hour long bi-weekly task

Lithium-Ion Battery Research Assistant   Jan. 2021 - Apr. 2021
University of Waterloo   Waterloo, ON
- Conducted cleaning and analysis of air pollution data over 10-year span by using the Interquartile Range technique with **Python** and **Pandas** to detect and filter outliers, reducing statistical bias
- Aided various graduate students in Li-ion battery research by writing Python scripts, conducting meta analysis, and developing 3D CAD models, resulting in becoming a co-author in 2 published research papers

Network Engineering Intern   Jun 2020 - Aug. 2020
Rogers Communications   Brampton, ON
- Lead the development of a **relational database** using Access to centralize data for over 2000 network towers previously held in locally-stored Excel files to increase team wide efficiency
- Normalized data to 1NF standard through **SQL queries**, resulting in deletion of 2000+ redundant data points
- Built relational database schema by using tower ID as the primary key to link data between tables
- Developed front-end UI and SQL queries to handle filtering, searching, and editing of data to reduce user input error and improve ease of data access

PROJECTS

TypeTrainer   Nov 2022 - Present
- Created **React.js** web application to test and improve users typing speed by using Random Word Generator API to generate passages for players to train their skills
- Use **Firebase** Auth REST API and **NoSQL database** to store user profiles and performance data

IGem Biotech Web Developer   Jul. 2022 - Nov. 2022
- Developed Wiki website using **React**, Bootstrap, and Sass with key accessibility features like text-to-speech, dark mode toggle, font size adjustment, and search bar to present IGem Waterloo research findings
- Won gold medal at IGem competition in Paris, France with full marks on website accessibility and features

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, SQL, HTML, CSS, SASS, VBA, Java
Technologies: React, Firebase, Node.js, Redux, Vue.js, MongoDB, PostgreSQL, Express.js, Excel, Access, Git
Certifications: Jovian Data Structures/Algorithms, Scrimba Advanced React, Microsoft MOS Excel 2016