**Laurence lu**

London, ON, N6A 3K7 | (647)-673-4490 | llu233@uwo.ca | https://github.com/llu233

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| **Summary Of Qualifications**  **Education** | * A proactive 3rd year Bachelor of Science student studying Computer Science at Western University * Skilled and knowledgeable in the use of R, Python, Java, C, Microsoft Office (Word, Excel, PowerPoint) and virtual meeting platforms (Zoom and Teams) * Strong interpersonal and relationship building skills with the ability to quickly establish rapport and build strong relationships with customers and colleagues * Experienced in retail and wet lab environments. Continuously adapting to change to overcome challenges. * Actively listening to clients, understanding their needs, and ability to explain intricate concepts in a simplified and easily understandable manner * Qualification in National Lifeguard, Standard First Aid and CPR from Lifesaving Society Canada * Fluent in Mandarin   Bachelor of Science, Honors Specialization in Computer Science 2020 - Present  **Western University**, London, ON   * Western Scholarship of Distinction for Entrance Average of 93% (2020) * Relevant Courses: Data Structures and Algorithms, Biological Statistics, Project Management   International Baccalaureate Diploma May 2020  **Glenforest Secondary School**, Mississauga, ON |
| **PROJECTS** | **Academic Projects – Western University**  Sept 2021 – May 2023  **CPU Scheduling Algorithms Simulation**: Simulate CPU scheduling algorithms for any given set of process ID’s and burst times stored in plain text format   * C program supporting three scheduling algorithms: First Come First Served (FCFS), Shortest Job First (SJF), and Round Robin (RR) * Utilized structure containing attributes: process ID, arrival time, burst time, wait time, turnaround time, remaining time, and finished status to calculate and display the average wait and turnaround times for all processes and scheduling algorithms   **Train Scheduling Simulation**: Simulate movement of two trains to transport passengers between five stations   * Used multi-threading in C to distribute 500 passengers from Station 0 to the other stations based on their respective passenger counts and until all passengers have reached their destinations * Used mutex locks to ensure thread synchronization and avoid conflicts when picking up and dropping off passengers   **Personal Projects**  Jan 2023 – May 2023  **MySite**: A personal portfolio created to document my achievements and work   * Learned how to make a responsive personal portfolio using HTML, CSS, and JavaScript, creating an interactive and immersive user interface * Implemented the ability to switch between dark/light color themes and set margins through use of CSS variables * Organized portfolio with interactive navigation menus, buttons, modal windows through use of JavaScript functions * Structured and organized website content using HTML to display page elements: text, images, and web links |
| **Work Experience**  **EXTRA-CurricularS** | **Research Assistant** May 2021 - Present  **Western University**, London, ON   * Obtained 61 MRA-imaged brain connectivity structures from the publicly available BraVa database from Susan Wright et al. * Used MATLAB, ParaView software to arrange characteristics of the branching brain structures in a table of: Node\_number\_attribute, x\_coordinate, y\_coordinate, z\_coordinate, radius, parentofnode * Used the data to find coordinates of carotid inlets, bifurcation points, and inlets where the brain model connects to the aorta model * Used a 1D solver, PM3-SimVascular software, to perform CFD simulations on aorta models and analyzed variables such as area, pressure, Reynolds numbers, and wall shear stress (WSS) * Prepared and presented a presentation of the research results at the 2021 PM3 workshop to attendees from different universities to demonstrate how 1D cerebral structural modelling can be used for the study of cerebrovascular disorders and to evaluate treatments (thrombolysis, mechanical thrombectomy)   **Grocery Associate** July 2020 – November 2020  **T&T Supermarket**, Mississauga, ON   * Restocked products, cleaned shelves, and maintained an organized store environment for improved customer experience. * Resolved customer concerns by actively listening, empathizing, and providing appropriate solutions, ensuring customer satisfaction. * Collaborated with a team of 8 coworkers to perform inventory checks to provide the newest and freshest products for customers, and improve their shopping experience * Gathered online grocery orders and delivered groceries to customer cars, providing convenient and reliable service. * Monitored the store to make sure everyone was wearing a mask and sanitized all surfaces and carts on a regular basis, following all COVID health and safety protocols, ensuring a safe and healthy environment for staff and customers.   **Lifeguard** August 2018 – June 2020  **Glenforest Secondary School,** Mississauga, ON   * Quickly responded to emergencies by providing immediate first aid and performing water rescues as needed, ensuring a safe swimming environment for all * Maintained pool equipment through regular inspections, ensuring a hazard-free environment and a positive swimming experience for guests. * Managed guests during swim competitions by enforcing safety rules, providing instructions, and coordinating with event organizers, contributing to the smooth running of the event and a fun experience   **Member – Google Developer Student Club** Sept 2022 – Present  **Western University**, London, ON   * Participated in Compose Camp workshop to learn how to build apps and user interfaces on Android using Jetpack Compose * Learned introductory concepts in Kotlin such as text output and conditionals * Learned how to use Android Studio to write and edit Android app code |
|  | **Member – School Swim Team** Sept 2016 – June 2020  **Glenforest Secondary School,** Mississauga, ON   * Reliably attended practices and competitions, demonstrating commitment and respect for team while showing dedication to ongoing skill development. * Remained calm under pressure, maintaining a ‘clear head’ when competing and responding to situations. |