

Bill Lin

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EDUCATION

University of Toronto

Bachelor of Science | Computer Science Specialist, Mathematics Major

CGPA: 4.0, 97% Average

Relevant Coursework: Calculus with Proofs, Multivariable Calculus, Linear Algebra,

Computer Science 1 & 2, Theory of Computation, Software Design, Computer Organization

Toronto, ON

Sep. 2022 - Present

COMPETITIONS

International Collegiate Programming Contests

Sep. 2022 - Apr. 2023

- Placed 9th on UofT's North American Qualifier to secure a spot on the ICPC team
- Represented University of Toronto at the 2022 ICPC East Central NA Regional Contest, placing 30th out of over 80 university teams

Canadian Computing Olympiad - Bronze Medal

May 2022

University of Waterloo - Centre of Education for Mathematics and Computing

- Qualified by placing in the top 25 out of over 8,000 other competitors in the Canadian Computing Competition
- Applied algorithms such as Dijkstra, BFS/DFS, Kruskal's MST and data structures such as Arrays, Queues, and Trees to solve problems

Google Code Jam Round 3 - 728th/28000

Jun. 2022

- Qualified for Round 3, placing 728th place out of over 28000 participants
- Used C++ to solve challenging data structure and algorithm problems

Google Kickstart - 70th/11000, 2nd in Canada

2021 - 2022

- Participated in every Google Kickstart Round from 2021-2022 (for a total of 16 rounds)
- Best rankings: **70th/11000** in 2021 Round D (2nd in Canada), **80th/7150** in 2022 Round B

WORK EXPERIENCE

Huawei - Software Development Contractor | C++

Jun. 2023 - Aug. 2023

Toronto, ON

- Collaborated with a dynamic team of developers to design an optimized algorithm aimed at surpassing the performance of the open-source linear algebra library OpenBLAS for general matrix multiplication
- Successfully achieved a performance boost of up to 4% compared to OpenBLAS for the given test data
- Designed a new tiling algorithm and auto-generated kernels in C++ to speed up computation

PROJECTS AND EXPERIENCE

Epidemic Simulator | Python, Pygame

Jan. 2023 - Apr. 2023

- Created a model consisting of people moving in a set area to simulate how a disease with certain properties would spread
- Allows the user to specify variables that impact the infection, such as number of people, rate of infection, infection radius, people's movement speed, etc.
- Displayed data to the user with tables storing data along with an animated graph showing the proportion of uninfected, infected and recovered
- Implemented Brownian motion as a toggle for the user to experiment with different movement trajectories

Teaching Assistant - Programming 11

Jan. 2022 - Jun. 2022

Steveston-London Secondary School

- Assisted in teaching an intro to programming class for grade 11-12 students
- Taught concepts such as arrays, binary search and recursion
- Helped students debug and assisted them with their Pygame projects

SKILLS

Languages: Java, Python, C++, HTML/CSS, LaTeX

Developer Tools: Git, Xcode, PyCharm, IntelliJ, CLion