Bill Lin

778-917-7190 | yr.lin@mail.utoronto.ca | in linkedin.com/in/bill-l-aa9018242 / | 1 github.com/linyirun

EDUCATION

University of Toronto

Toronto, ON

Honors Bachelor of Science | Computer Science Specialist, Mathematics Major

Sep. 2022 - Present

Arts & Science Internship Program (Co-op)

CGPA: 4.0, 97% Average

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

Computer Organization, Software Design, Data Structures & Algorithms

WORK EXPERIENCE

Huawei - Software Development Contractor $\mid C++$

Jul. 2023 - Sep. 2023

Remote

- Collaborated with a 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
- Designed a new tiling algorithm based off of research papers in C++ to speed up computation
- ullet Successfully achieved an average performance boost of 5% compared to OpenBLAS for the given test data
- Wrote progress and research reports and held biweekly presentations to keep supervisors updated

Competitions

International Collegiate Programming Contests

Sep. 2022 - Present

- Placed 6th on UofT's North American Qualifier to secure a spot on UofT's 2nd ICPC team
- Represented University of Toronto at the 2023 ICPC East Central NA Regional Contest, placing 10th out of over 80 university teams

Google Code Jam Round 3 - 728th/28000

Jun. 2022

- Placed 728th place out of over 28000 participants in Google's annual programming competition
- Used C++ to solve challenging data structure and algorithm problems

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 algorithmic problems

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

Jan. 2021 - Dec. 2022

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

PROJECTS AND EXPERIENCE

Epidemic Simulator | Python, Pygame

Jan. 2023 - Apr. 2023

- Collaborated with 3 others to make an epidemic simulator, using GitHub for version control
- 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.
- Displays data to the user with tables storing data along with an animated graph showing the proportion of uninfected, infected and recovered

Teaching Assistant - Programming 11

Jan. 2022 - Jun. 2022

 $Steveston\text{-}London\ Secondary\ School$

- 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++, LaTeX

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

Libraries: Pygame, NumPy, Pandas