William Wang

Software Engineer and Computer Science Student

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Objective

Fourth-year undergraduate student with nearly 2 years of work experience in C++ and Python and a strong foundation in math and computer science. Eager to contribute my experience writing and communicating clean, performant code in a full-time software engineering position. My peers frequently praise my neat and organized work, and I can always be relied upon to learn concepts quickly and complete tasks on time with great attention to detail.

Education

University of Toronto Sep. 2019 – Apr. 2024 (expected)

Honours Bachelor of Science, Computer Science Specialist & Mathematics Minor *Toronto, ON*

- Cumulative GPA: 3.94/4.00
- Arts & Science Dean's List Scholar (2020 – 2021 and 2021 – 2022 academic years)
- Relevant Courses: Data Structures, Algorithms, Software Engineering, Artificial Intelligence, Machine Learning, Operating Systems, Databases, Web Development

Experience

Software Engineer Intern May 2022 – Sep. 2023

Intel Corporation *Toronto, ON*

- Optimized and published C++ code to demonstrate and implement complex high-performance algorithms on FPGAs, such as systolic matrix multiplication, using Intel's oneAPI compiler
- Presented and proposed coding techniques that streamlined user experience and decreased run time by up to 70%
- Leveraged my skills gained from developing libraries, tutorials, and reference designs to support customers
- Led meetings with colleagues in the field to showcase new features and gather feedback to drive product focus

Software Engineer Intern May 2020 – Aug. 2020

Ciena Corporation *Ottawa, ON*

- Designed Python programs for an elaborate test automation framework with the Packet Control Plane Team
- Expanded and improved the reporting of test case results through automatic email report charts
- Produced short tutorial videos to document and explain features in a creative and easy-to-use way for users

Projects

AI Search Tool for Legal Rules | *Python, Flask, React, MongoDB, Git, OpenAI GPT-3* Jan. 2022 – Apr. 2022

- Co-engineered with a team an innovative search tool utilizing OpenAI's GPT-3 engine to help legal teams accelerate and simplify the process of searching for laws
- Devised an efficient database and backend design that improved ease of development and flexibility for future expansions
- Collaborated and managed the project using agile software development principles to maximize team efficiency

File System Design and Implementation | *C, OS Design, Systems Programming* Sep. 2021 – Dec. 2021

- Designed and implemented the algorithms and APIs for an extent-based file system in C

Simple Map Diagrams – Front-end Library | *JavaScript, HTML, CSS, APIs* Sep. 2021 – Dec. 2021

- Developed a front-end JavaScript library to streamline the creation of interactive mini-maps for web apps

Technical Skills

Languages: C/C++, Python, Java, SQL (Postgres), JavaScript, HTML/CSS
Frameworks: OpenCL, oneAPI/SYCL, React, Node.js, Flask, Django
Developer Tools: Git, GitHub Actions, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Other: FPGA High-Level Synthesis, Hardware Acceleration, Customer Support