# Bill Wang

647-818-7599 | billwang7599@gmail.com | linkedin.com/in/bw7599 | github.com/billwang7599

# EDUCATION

## University of Waterloo

Sept. 2022 – April 2027

 $Waterloo,\ ON$ 

Bachelor of Software Engineering

• Courses: Software Engineering Principles, Statistics for Software Engineering, Digital Circuits and Systems, Intro to Database Management, Data Structures and Data Management, Foundations of Sequential Programs

#### EXPERIENCE

## Software Engineer Intern

Feb. 2024 - May 2024

Vancouver, BC

Huawei Technologies

- Enhanced encapsulation and improved compilation time by 30% by refactoring the C++ polynomial solver SDK to use pImpl and Command Pattern styles
- Optimized system performance by **identifying over 20,000 inactive resources using shell scripts**, parsing them with **Python and Pandas**, and removing them to allocate resources for other processes
- Accelerated Jenkins pipeline speed by 10x by modifying and refactoring the Groovy script
- Ensured all future release packages included necessary library files and functioned correctly by developing comprehensive Jenkins scripts that also executed SLURM job scripts for thorough validation

## Software Developer

May 2023 - Aug. 2023

Adaptive Pulse

Waterloo, ON

- Engineered a full-stack application with an integrated AI chatbot to facilitate bids and tenders, utilizing Streamlit for the front-end, and Amazon Redshift, FastAPI, and Docker for back-end processing and queries
- Developed a Python Q&A chatbot using LangChain and OpenAI's LLM, with a vector database (Pinecone) referencing over 3,000 documents, achieving a 95% accuracy rate in responses
- $\bullet$  Automated the acquisition, storage, and retrieval of 500K+ documents from RFP platforms using Selenium, Requests, and Amazon S3

## Projects

#### Server Hosting | Linux, Cron, SSH, FRP

- Hosted gaming servers for dozens of players using a Linux instance on Cloudstack VM
- Utilized FRP for reverse-proxy connections, bypassing firewalls by routing through two different servers
- Automated backups using cron to run a Python script, periodically SSH copying folders to the main server

## Schedulii | React, TailwindCSS, Typescript, Nx, Docker, Rust

- Collaborated to develop an app facilitating student meetups with React.js and TailwindCSS for the front-end, and Rust for backend requests
- Enhanced app usability and UI/UX by developing a monthly calendar with React.js, TSX, and TailwindCSS

### Her Code Camp | Python, Rotman API

- Placed 2nd overall by spearheading the team and organizing meetings to develop an efficient trading algorithm
- Generated \$10,000+ of profit in a simulated environment by coding the algorithm with Python and Rotman API

### Canada FBLA | NodeJS, Express.js, jQuery

- Placed 10th nationally by developing a website that presents random questions to users, utilizing Node.js, Express.js, and jQuery
- Created a dynamic Express API for handling requests and manipulating a JSON file for efficient storage and retrieval

## TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS, Assembly

Frameworks: React, Node.js, FastAPI, Serverless, Express.js, LangChain, Streamlit

Other: Git, GitLab, Docker, AWS (S3, EC2, Redshift, Lambda, Boto3), Linux, Vim, Figma, Jira, Jenkins,

BeautifulSoup, ScrapingBee, Selenium, Pinecone