

MARTIN WONG

📍 Vancouver, BC | ✉ mwa147@sfu.ca | 🌐 Mighty303 | 🌐 <https://mighty303.github.io>

EDUCATION

Simon Fraser University

Bachelor of Science, Computing Science

Expected May 2025

Burnaby, BC

WORK EXPERIENCE

Software Developer Intern

Jul 2023 - Present

Avena Tech Corporation | NextJS, NodeJS, MongoDB, Tailwind

Vancouver, BC

- Redesigned and developed full-stack websites utilizing Figma, NextJS, and Tailwind optimizing load times by **105%**
- Increased deployment speed by **50%** by creating a CI/CD pipeline for integration, unit testing, and deployment on a VPS
- Developed and integrated REST API endpoints using Express and MongoDB, migrating over 60 Wordpress blogs to a new, efficient platform for future blogs
- Diagnosed and resolved issues with WordPress websites, including troubleshooting plugin conflicts, database connectivity problems, and server-related issues to improve load times

Undergraduate Research Assistant

Apr 2023 - Sept 2023

Simon Fraser University | C#, Python, Unity

Vancouver, BC

- Developed Unity simulations in C# for IMU sensor data in order to analyze whether it accurately matches the real world, allowing researchers to see how good their machine learning models are
- Collected XYZ and rotational data generated from training data generated by the T2M-GPT model in order for researchers to identify joints of motion to increase accuracy to real human motion
- Collaborated with graduate students from SFU and Dartmouth College under the supervision of Dr. Xing-Dong Yang

Technical Support

Aug 2021 - Aug 2023

Auphan Software

Vancouver, BC

- Resolved 1000+ tickets for POS software systems, payment processor integration, and software installation with big North American companies
- Collaborated with sales, development, and technical support teams to communicate regression reports and ensured tracking and support until resolution
- Troubleshooted database and server outages involving Apache, PostgreSQL, and pgbouncer

PROJECTS

Personalized AI Chatbot | Python, NodeJS, FastAPI, AWS EC2

May 2024

- Finetuned Meta's Llama2 LLM on **120,000** discord messages to create a personalized chatbot to respond in the style of the user
- Trained and deployed finetuned the model on Replicate which is called by a FastAPI endpoint containerized on **Docker** and hosted on an **AWS EC2 instance**
- Developed a discord bot using discord.js to call the FastAPI endpoint and respond to the users

Kanban Planner | MongoDB, ExpressJS, ReactJS, NodeJS

Jan 2023

- Developed and deployed a fullstack Kanban Planner app which allows users to manage their tasks and projects in an organized and efficient way, using REST APIs and Mongoose for connecting Node and MongoDB
- Used Material UI and react-beautiful-dnd for CRUD operations, allowing users to create, move, delete tasks
- Implemented robust client and server-side form validation using AJV, a JSON schema validator library, to ensure data integrity and maintain high standards of data purity in the web application

Command-line Document Handler | Java

Apr 2022

- Developed a document handler GUI simulated in a command-line interface using Java, featuring document creation, opening, closing, resizing
- Designed a UML diagram showcasing 6 key classes, abstract classes, inheritance, and polymorphism reducing development time with reduced complexity

TECHNICAL SKILLS

Languages: C++, Java, Python, x86, HTML, CSS, JavaScript, Kotlin, SQL

Frameworks/Libraries: ReactJS, NextJS, Express, Node, Mongoose, Material-UI, Tailwind, Jest

Developer Tools/Technologies: Git, Clickup, Webpack, MSSQL, Linux, Docker, AWS EC2

EXTRACURRICULARS

- Competed in Brazilian Jiu Jitsu and Judo for 6+ years, achieving 30+ gold medals.
- Dedicated 60+ hours as an assistant Jiu-Jitsu instructor to students from ages 6-12.
- Planned and hosted a 40 person dodgeball tournament, hosting the first athletics event in 5 years.