Martin Wong

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EDUCATION

Simon Fraser University | **May 2022 - May 2026**
Bachelor of Science, Computing Science | *Burnaby, BC*

WORK EXPERIENCE

Software Developer Intern | **Jul 2023 - Present**
Avena Tech Corporation | *Vancouver, BC*
- Redesigned, developed and deployed full-stack websites utilizing Figma, **React**, and Tailwind optimizing load times by **75%**
- Increased deployment speed by 50% by creating a **CI/CD** pipeline for integration, unit testing, and deployment on a VPS
- Developed and deployed containerized REST API endpoints using **Express** and **Postgres**, migrating over 60 WordPress blogs to a new, efficient platform for future blogs
- Coordinated 15 client meetings to discuss requirements and design changes, ensuring alignment with client needs and adherence to UX/UI principles

Undergraduate Research Assistant | **Apr 2023 - Sep 2023**
Simon Fraser University | SFU iXLab under Dr. Xing-Dong Yang | *Vancouver, BC*
- Enabled machine learning model validation by developing IMU sensor data simulations utilizing C# and Python
- 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, increasing **CSAT** by 30%
- 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**
- Fine-tuned 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 the fine-tuned model on Replicate accessed by a FastAPI endpoint, containerized on **Docker** and hosted on an **AWS EC2 instance**, and deployed on via PM2 on a personal home Ubuntu server for continuous uptime
- Wrote Python scripts to convert and preprocess Discord message data from JSON to JSONL, filtering sensitive information from **3,000** messages and ensuring seamless integration to Llama2 model and user privacy

Kanban Planner | *MongoDB, ExpressJS, ReactJS, NodeJS* | **Jan 2023**
- Developed a full-stack Kanban Planner app which allows users to manage their tasks in an organized and efficient way
- 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
- Used Material UI and react-beautiful-dnd for CRUD operations, allowing users to create, move, delete tasks

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, reading, and writing
- Designed a UML diagram showcasing 6 key classes, abstract classes, inheritance, and polymorphism reducing development time with reduced complexity

TECHNICAL SKILLS

Languages: Java, C, C++, Python, Go, Kotlin, x86, HTML, CSS, JavaScript, Typescript, SQL
Frameworks/Libraries: React, ReactNative, NextJS, ExpressJS, NodeJS, Mongoose, GraphQL, Tailwind, Jest
Developer Tools/Technologies: Git, Docker, AWS (EC2, ECS, ECR), Linux, MSSQL, PostgreSQL, Postman

VOLUNTEERING

Microsoft TEALS | *Teaching Assistant* | **May 2024 – Present**
- Led Python programming sessions for grade 8 and 9 students, encouraging enthusiasm for coding
- Evaluated student progress through grading assignments and providing positive constructive feedback to help students grow
- Established a positive learning environment that supports diversity, inclusion, ensuring all students feel valued and supported