Ting Jia (TJ) Wu

3rd Year, Computer Science

15 December 1998

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https://github.com/DawtDawt

Education

B.Sc in Computer Science Co.op
University of British Columbia
Seasonal GPA: 3.67

Technical Skills

Programming: C, C++, Java, Lua, Python, R, Javascript, Latex
Web: React, HTML5/CSS, Express
Tools: Git, SVN, Wireshark/tcpdump, Linux tools (such as socat), Qualcomm Tools, SQL and non-SQL DBs, FE tools (such as Redux, React), Unity, Eclipse, VS2019, Github

Extra-Curricular

Computer Science Club
• Guided undergraduates in their respective fields and interests
• Organized external events to promote interest in Computer Science

Volunteer

Nutritional Transparency Initiative for Students, UBC
Club formed in 2018 aimed at improving life styles of UBC students
• One of the initial founding members
• Development of a website and app is underway to reach more students
• Plans to expand the network to incorporate numerous universities

bcGameJam 2018, Vancouver
Hackathon event hosted in BCIT
• Guided first-time participant
• Assisted in workshops: C/C++

BMO Marathon, Vancouver
BMO hosted marathon featured in the Greater Vancouver Area
• Co-organizer for sale booths
• Station manager for water stops
• Volunteered for 3 consecutive years

Technical Projects

ubc science co-op
T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

Dibs (Javascript) (Group) — June 2020 - Present

• Online full-stack application for barbershop time-slot reservation
• The software provides a platform for owners of barbershops to advertise shops and customers to find reservations based off their needs. It features a secure login system with hasing, complex time filters, and owner flexibility/customization.
• Inspired by social distancing that was prominent during COVID-19.
• Designed, developed, and integrated the back-end infrastructure, including schemas, endpoints, basic database operations, search/scheduling algorithms.
Skills: Design Patterns, Javascript, Mongoose/MongoDB, Express, React, Node.js, Sorting/Search Algorithms, Scheduling Algorithm

Mythos (C#) (Group) — January 2020 - June 2020

• 2D platformer game developed natively on Unity as a club. • As a classic 2D platformer inspired from Hollow knight, the game features a comprehensive magic combat system featuring a re-structured physics engine, challenging boss/mob mechanics, and in-depth level design. Product made in game development club.
• Designed, developed, and integrated Kalgor (boss) for product demo.
• Received official funding from UBC Student Body as of June 2020 to continue.
• Temporarily dropped due to concurrent work at Netgear and university class.
Skills: Design Patterns, Android Studios, C#, C# packages and tool

SuperRent (Javascript) (Group/School) — September 2019 - December 2019

• Comprehensive car rental data-basing renting system.
• As a school project pushed beyond it's requirements. the application features a comprehensive location and time based algorithm to optimize car rental schedules.
• Designed, developed, and integrated the back-end infrastructure, including schemas, endpoints, basic database operations, search/scheduling algorithms.
• Allowed improvements in error-handling and algorithm design
Skills: Design Patterns, Object-oriented programming, WebStorm, React, Express, Postgres, Javascript, CSS, Git

Boxes (Lua) (Group/Hackathon) — February 2019

• 2D dungeon RPG game created at BCGameJam 2019 that introduced deep storytelling through the use of dynamic obstacles, multi-level designs, and friendly/hostile NPCs. Made using Lua and Love (game engine)
• Coordinated coding of complex interweaving classes simultaneously with others by using Git, which liberated additional time to introduce additional features
• Multi-tasked on game design, engine improvement, character movement, object creation, tools for level design, and NPC/object interactions.
Skills: Design Patterns, Git, Lua, Love

Work Experience

Firmware Engineer - Netgear, Richmond — Jan 2020 - Sept 2020

Co-op firmware developer for the Canada branch of Netgear
• Projects: MDM9x07 known as LB2120, NTGx55 known as M5, Others
• Stack: C, C++
As a first time co-op student, I was familiarized with the company code stack through management of NV files, manipulation and handling of registers, network protocols such as ICMP, HTTPS in both TCP and UDP through failover (market name: Always-On Wifi). Ported and integrated core features of previous products into newer ones such as M5 and an unannounced product. Later I was able to contribute in the design phase of a new product, handling features such as FOTA (firmware over the air), NV backups, and security features such as DHCP, routing table, iptables management.