

Jonathan Hsu

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<https://github.com/bit172>

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SUMMARY OF SKILLS AND QUALIFICATIONS

Operating Systems | Windows • Android • Linux

Applications | Microsoft Office: Word • Excel • PPT • Eclipse • Visual Studio Code • Visual Studio

Programming | Java • JavaScript • TypeScript • Python • PHP • HTML • CSS • Git • C# • Web API • C • Ruby • Angular • WPF

Other | Logisim

Languages | French | Spoken & Written • English | Spoken & Written • Chinese (Mandarin) | Spoken

Licenses & Certifications | Valid driving permit

EDUCATION

Bachelor of Engineering – Software Engineering Co-op

2017- 2021 (Expected)

Concordia University, Montreal, QC

- Member of the Institute for Co-operative Education
- Relevant Courses: Object Oriented Programming, Web Programming, Data Structures and Algorithms

DEC in Pure and Applied Sciences

2017

Marianopolis College, Westmount, QC

PROJECTS

Final Project for Digital Electronics Course (Academic)

2017

Marianopolis College, Westmount, QC

- Built a prototype of a card game similar to Black Jack using the logic circuit simulation software Logisim in a team of three
- Designed a scoring system using Boolean algebra and logic gates
- Created a card distribution system using digital comparators, random number generators and flip-flops
- Implemented the idea of modular design by separating devices with different roles
- Fixed timing issues by redesigning the scoring system to account for propagation delay and glitches

Java Program simulating University Course System (Academic)

2018

Concordia University, Montreal, QC

- Built a program that simulates a course request system based on a user input
- The program checks if a student has the requirements to enroll in a class
- Implemented using linked list data structures, interfaces, inheritance and file i/o

Discord Bot (Personal)

2018

- Programmed a bot for the freeware VoIP application Discord using the Discord API
- Programmed the bot to output a random image from a directory when a command is sent to the server
- Programmed a weather command using the weather-js module from the npm package manager
- Implemented using JavaScript (Node.js) and event driven programming
- Node.js, Discord API

Huffman coding tree and splay tree (academic)

2018

Concordia University, Montreal, QC

- Designed a solution for creating a Huffman coding tree and a Splay tree
- Implemented a Huffman coding tree to encode strings
- Implemented a priority queue
- Implemented the self organizing Splay tree
- Java, Data Structures and Algorithms
- <https://github.com/bit172/COMP352-Assignment-3/>

Web application for ConUHacks 2019 (Hackathon)

2019

Concordia University, Montreal, QC

- Created a web application to provide a solution for food waste
- Designed the front-end portion of the web application
- Implement the UI using Bootstrap and jQuery
- HTML, CSS, JavaScript, Bootstrap, jQuery
- <https://github.com/bit172/WasteHero>
- <https://devpost.com/software/wastehero>

Web application for uOttahacks 2019 (Personal)

2019

University of Ottawa, Ottawa, ON

- Created an automated DJ based on multiple user requests in a queue
- Implement the UI using React and Material UI
- Used the Solace messaging service through their Node.js API
- Used the Spotify Web SDK to connect Spotify to our application
- HTML, CSS, JavaScript, React, Material UI, Node.js
- <https://github.com/uottahack19>
- <https://devpost.com/software/group-spotify>

WORK EXPERIENCE

Cashier/Customer Service

Sept 2016 – present

Photo St-Denis, Montreal, QC

- Sent emails to customers to ensure customer satisfaction
- Sent customer orders using the file transfer service WeTransfer
- Processed 35mm films by using the Noritsu QSS-2901 and Noritsu QSF-V50 machines

Software Developer/Electronic Production Tester, Production

Sept 2018 – Dec 2018

Genetec, Montreal, QC

- Developed part of a database management web application as a full-stack web developer
- Improved a hardware test for the Synergis Cloud Link appliance written in C#
- Tested the Synergis Cloud Link appliances for production
- Technologies and Tools used: C#, Angular, TypeScript, HTML, CSS, Web API, WPF, Visual Studio, Microsoft Azure, REST APIs, Event Sourcing, CQRS (Command Query Responsibility Segregation)

INTERESTS

Passions

Piano, Guitar