Hello

My name is Jack Hu

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Skills

Languages: Java, Python, C, JavaScript, TypeScript, HTML, CSS
Technologies: NodeJS, ElectronJS, React, React Native, Firebase, MongoDB

Education

Candidate, BASc   Computer Software Engineering
University of Waterloo   2019 – 2024
Term 1A
Relevant Courses: Programming Principles in C, Methods of Software Engineering

Experience

Junior Software Engineer   Pin'd Inc.
Jul 2019 - Nov 2019   Toronto, ON
- Utilized the **React Native** framework to build venue description pages of a mobile social media app
- Developed backend **data structures** for venues with **Firebase**
- Designed basic data format/upload tool as a website using **HTML, hosted with Firebase**
- Created **admin tools** and functions to do database cleanup and linking/organization with **JavaScript, TypeScript and Python**
- Integrated **MongoDB** with existing Cloud Firestore database in order to reduce costs

President   JA Southern Alberta
Oct 2018 – Mar 2019   Calgary, AB
President of The Scrunchie Company, a Junior Achievement company
- Planned and organized board meetings
- Relayed information to shareholders
- Ensured communication between departments
- General direction, creating an **ROI of 200%** after **donating 50%** revenue to charity

Projects

Flex Smart Mirror
Oct 2019 - Dec 2019   Personal
- Used **React** with **ElectronJS** to design a full-featured interface which would appear in a mirror, powered by a Raspberry Pi.
- Integrated smart mirror software with an **OpenCV**-based facial recognition system.
- Implemented the IBM **Watson API** to create an assistant with a trigger word.

Alien Tax Utility
Jul 2018 - Feb 2019   Personal
- Created utility that **reads Excel sheets**, formats the information and **fills a PDF form** using Java.
- Used **Apache POI API** to read multiple data types and sheets from one workbook.
- Utilized **Apache PDFBox API** to dynamically write data with certain tags from Excel sheet to ID'd input fields on a PDF form.

Text Encrypter
Apr 2018 – May 2018   Personal
- Devised a system to **generate and hide a key** for **obfuscating data** within a file.
- Wrote a converse tool which **found a hidden key** and decoded the file.
- Packaged an **executable** that would search its directory for compatible file types, then encode regular files and decode previously encoded files.