

# JUNG HYUN SOHN

## EXPERIENCE

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### ME Onsite Inc. Backend Engineer

Calgary, Dec 18 – Dec 19

- Utilized Microsoft's **DirectShow** in C++ to create a video replay application allowing simultaneous capture and record
- Integrated **GraphEdit** to increase the number of available physical inputs by **200%**

## PROJECTS

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### Hide.IO

- A create-react-app project using **React** as the front-end framework deployed on **Heroku**
- Implemented the backend with **NodeJS** and **Express** that makes calls to **MongoDB**
- Integrated **Google OAuth** client-side for user authentication
- Utilized a **WebSocket** implementation to communicate between server and client
- Updated components to achieve cross browser support, improving user experience for browser restricted users
- Allows users to play a digital hide and seek game with **7+** players, while also implementing tasks such as real-time chat and lobby viewing

### Bird's Eye

- A **React Native** application created for CalgaryHacks 2020
- Built a machine learning algorithm with **TensorFlow** to detect images of icy and safe sidewalks
- Connected Bing Search API Endpoints to train and test our Convolutional Neural Network
- Connected the algorithm to **MongoDB** which then passed the information to a **Heroku**-hosted **NodeJS** server
- The mobile application utilized Google Map's API to visualize coordinate points

### Database Management System

- A Database Management System utilizing **LAMP** stack for a local decal company in Calgary.
- Planned and implemented procedures with MySQL to maintain data and referential integrity between entities of data
- Optimized query performance and populated test data, while performing quality assurance of the MySQL server

### Library Management System

- A Library Management System application for Mount Royale University using **Java**, built with 4 other team members
- Implementing the front-end component with **Java Swing**, through Eclipse's **WindowBuilder**
- Executed **100%** of user stories provided by the client throughout 4 iterations
- Built the testing infrastructure for the system by setting up **Junit**, implementing unit tests to achieve over 90% codebase coverage

## SKILLS

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**Language:** Python • JavaScript • Java • C++ • PHP • HTML • CSS

**Full-stack:** React • Node • MongoDB • MySQL • Apache

**Other:** Git • React Native • TensorFlow • Heroku • AWS S3 • jQuery • D3 • Shell • Bash

## EDUCATION & EXTRACURRICULARS

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### University of Calgary

Sep 16 – May 21 (Expected)

Bachelor of Computer Science

Cumulative GPA 3.4 • Major GPA 3.5 • Dean's Honor List 2019

Vice President Events of the Hong Kong Students' Association • Participant of CalgaryHacks 2020