

SELECTED SKILLS

Languages: Java, C/C++, Python, JavaScript, HTML, CSS

Frameworks: Django, NodeJS, ExpressJS, ReactJS, jQuery

Tools: Git, MATLAB, Excel, Postman, MochaJS, Photoshop

Databases: MongoDB, PostgreSQL, SQL, CRUD & REST APIs, Access

WORK EXPERIENCE

Software Engineering Intern for Royaltymine (ZHY Interactive Incorporated)

June 2019 – Aug 2019

- Developed online marketplace for sharing music and collecting royalties among music creators and investors
- Cloud-based application built from scratch using **NodeJS**, **MongoDB**, **React** and currently used by over 100+ members
- Major contributor of information engineering, developing software architecture and data models, managing analytics, and controlling flow of payment splitting among shareholders
- Created **REST APIs** through React and NodeJS for CRUD operations and facilitating database transactions
- Automated and manual testing of back-end features and API endpoints through **Postman** and **MochaJS**

EDUCATION

University of Toronto St. George

2018-2022 (expected)

Computer Engineering | Bachelor of Applied Science

PROJECTS

Process Improvement for reBOOT Canada

Oct 2018 – July 2019

- Redesigned information management for reBOOT Canada by creating the first relational management system
- **PostgreSQL** database and scripting in **Django** to perform analytics, user authentication and facilitate database transactions
- Cloud-based web application built with Python to perform task automation for improving data integrity and donation tracking

Piano Chord Detection Using Fourier Analysis

Nov 2017 – Feb 2018

- Self-directed research project to identify music notes of piano chords in a sample of music
- Self-taught university-level mathematics as a high school student
- **Java** and **MATLAB** program to simplify complex calculations of the Fourier Transform and implement sorting algorithms
- **Python** Mingus library used to assess frequency distribution and identify specific musical keys

Augmented Workouts

Winning Project at JAMHacks 2017 hackathon

- Developed fitness gaming console to make wearisome exercise more enjoyable by immersing the user in a responsive 3D virtual environment
- Used **C++** with **Arduino** to generate pedometer functions and construct a calorie counter by interpreting gestures as exercise movements

BTOC Solutions

Oct 2016 – March 2017

- Designed and implemented the first-ever database system to organize client payment information in order to reduce inefficient storage and cases of data loss
- Management system created from scratch and raw data using **SQL**, **Microsoft Access** & **Excel**
- Advanced features include an automatic email system, macros, report & form generation, and input error handling

LEADERSHIP & ACTIVITIES

Lead Workshop Coordinator for Major League Hacking at TurnerHacks in June 2018

Oct 2016 – March 2017

- Facilitated the first hackathon at local high school to encourage student involvement in technological innovation
- Directed volunteers to lead interactive workshops in Web and Android App Development for attendees of hackathon
- Main presenter for workshops as well as provided mentorship and troubleshooting assistance to various design teams
- Major involvement in event planning and scheduling for 50+ guests

University of Toronto Hyperloop Team – Software Design Team Member

Oct 2019 – Present

- Designing control system of responses to levitation and braking of the pod in **C++**
- Planning to integrate various sensors with Arduino and Linux boards for initiating emergency protocols