# DAVID SHAN

#### **EDUCATION**

## **University of Toronto**

Toronto, ON

H.B.Sc Computer Science

Graduated June 2020

• Related Coursework: Software Design, Systems Programming, Web Programming, Operating Systems, Databases

## **EXPERIENCE**

**OpenText**Software Developer Intern

Waterloo, ON

May 2018 - Dec 2018

Full stack development for OpenText Core, a cloud storage web application.

- Assisted in the development of a **Ruby** script from start to finish (planning, coding, deployment), which successfully migrated ~120TB of customer data between two remote data centers
- Generated hot-fixes and co-led the communication between the development and deployment teams during the two week migration, ensuring everything was done smoothly and according to specification
- Implemented performance-enhancing features and fixed bugs in the **Node.js** back-end and **AngularJS** front-end, with supporting **Mocha** integration tests and documentation reducing home page loading time by 16%
- Performed QA and regression testing to investigate potential issues and bugs
- Mentored incoming interns to catch them up with the current project status and tools used

# **Hart House Singers**

Toronto, ON

Webmaster

Oct 2016 – Apr 2017

Web maintenance and executive member for a student choir group

- Collaborated with an executive team frequently to discuss event planning and improvements to the club, which ensured transparent communication between members and committee and allowed club to run smoothly
- Responsible for maintaining the official website using the Wordpress framework

## PERSONAL PROJECTS

#### **E-Business Card** (Work in Progress)

- Mobile app for people to easily exchange professional information (i.e. portfolios, contact info) through QR codes
- Built for Android systems using Firebase, with secure user authentication and persistent file storage

# **Out of This World Cafe Ordering System**

- Mobile food pickup service for a charity organization: the Working for Change's project "Out of This World Café"
- Created customer ordering cart page with JavaScript, HTML/CSS, Bootstrap using MVC design principles
- Set up the MongoDB Atlas database, populated it with menu items, and connected it to the Flask back-end
- Responsible for deploying on **Heroku** using **Docker** containers, and communicating regularly with the café's head of operations

## **HumIT (Shazam Copy)**

- Submission for Hack The North. A **Java** based application that intelligently searches for songs by the way they sound through humming and/or singing
- Implemented core logic of sound matching algorithm, utilizing databases generated with **PostgreSQL** to match correct song info

#### **File Synchronization Program**

- Portable, network-capable file synchronization system built for UNIX systems using C
- Implemented with socket programming and multi-threading capabilities for fast and responsive feedback

# **SKILLS & INTERESTS**

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

Technologies/Frameworks: Node.js, AngularJS, Flask, Docker, UNIX, Git, Visual Studio Code, JIRA

Conceptual: Design Patterns, OOP, MVC, REST, NoSQL, Relational Databases, Agile

Interests: Avid long-distance runner, Hiking, Camping, Playing Guitar, Reading Fantasy & Sci-fi