# Zihan Zhang

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Master of Engineering Student from University of Toronto

### **ABOUT ME**

Two years of experience working with Python, HTML, Swift and MySQL.

Experience working with Unity and C#.

Experience with JavaScript, jQuery, node.js and React.js.

Solid physics and mathematics background.

Familiar with data structure, algorithm and object-oriented programming.

Passionate about learning new things and developing world-class application.

# **EDUCATION**

Bachelor of Science: Physics (Sep 2014 – Jun 2018), University of Toronto

- Dean's List Scholar (2017-2018)
- Graduate with high distinction (Average GPA higher than 3.5)
- Minored in Mathematics
- Did advanced physical experiments including X-ray fluorescence, Quantum Interference and Entanglement and Measurement of the Compton total cross section.
- Took a graduate level high energy course.

Master of Engineering: Computer Engineering (Sep 2018 – Jun 2020), University of Toronto

- Learned data structure and algorithm, cloud computing and mobile app development
- Learned data science and machine learning (Python and Scikit-learn, which is a free software machine learning library for the Python programming language)
- Average GPA 3.6

# **PROJECTS**

Notate (term project)

- An iOS app written in Swift which transcribes melodic ideas recorded by the device's built-in microphone into traditional Western music sheet.
- Responsible for writing the front-end of Notate, including most of the UIs and displaying sheet music (using JavaScript).
- Tested on iOS 13.4.
- Built under the supervision of Professor Jonathan Rose.

#### Fake Instagram (Individual)

- An iOS app written in Swift (SwiftUI) which allows users to share photos as well as the the corresponding comments with others.
- Used Google Firebase to perform user authentication and data storage.
- Tested on iOS 13.3.

#### Receipt Reader

- A Python flask project deployed using AWS Lambda, allowing users to keep track of their expenditure by taking a photo of their receipts and uploading it to the server.
- Wrote code for storing images uploaded by users to AWS S3 Bucket, getting and updating information in Amazon Relational Database Service (DynamoDB, MySOL).
- Responsible for writing the back end of the project (Python) and the HTML part of the front-end.

#### Tower of the Sorcerer (Individual Unity Project)

- Remade the game Tower of the Sorcerer (N.W 1996) using Unity and C#
- Used only the textures from the original game.
- Had a deeper understanding in inheritance and polymorphism when handling with different types of enemies in the game.

## WORK HISTORY

Intern at Suzhou TF-AMD Semiconductor Co., Ltd. (Aug 2019 – Sep 2019)

Helped installing operating systems on new computers, fixing hardware and software issues for other employees. Reduced workload at the helpdesk. Intern at Suzhou Huigu Intellectual Property Service Co., Ltd. (Aug 2018 – Sep 2018)

- Examined intellectual properties using the Global Design Database managed by the World Intellectual Property Organization (WIPO). Helped customer
  understand the situation of their inventions in application.
- Wrote introduction for a project concerning geographic information technology owned by companies around the world.