# Ian Chen

647-563-1098 | <u>ianye.chen@mail.utoronto.ca</u> github.com/ianyechen | <u>linkedin.com/in/chen-ian</u> | <u>ianyechen.github.io</u>

#### **EDUCATION**

#### **UNIVERSITY OF TORONTO**

Sep 2018 - Apr 2022 | Toronto, ON

- BASc in Computer Engineering
- Minor in Artificial Intelligence Engineering
- Certificate in Engineering Business
- Cumulative GPA: 3.81 / 4.00
- Honors: Dean's List (2018 Current)

#### **WORK EXPERIENCES**

## **SOFTWARE DEVELOPER | CENTIVIZER**

Sep 2019 - Feb 2020 | Toronto, ON

- Implemented a new mode to their game using <u>Socket.IO</u>, which allowed players to compete with others both locally and online; resulted in a 25% increase of total users
- Refactored company code in <u>Node.js</u> for sending data to their internal database which reduced the server costs by 10%
- Developed the interface for the game menu using <u>HTML</u>, <u>CSS</u>, and <u>Javascript</u>

# **SOFTWARE ENGINEER | YPCLOUD**

May 2019 - Aug 2019 | Taipei, TW

- Built admin tools with <u>Node.js</u> which increased the accuracy of extracting company data used by other company services by 30%
- Created and published a <u>Snap</u> application to transmit data to services of the company ran on the <u>Linux</u> platform which was used by 2 company clients
- Wrote bash scripts to orchestrate system start-up tasks and to test user programs; the scripts were used in 80% of the company devices running the <u>Raspbian</u> operating system

#### **SKILLS**

#### **TECHNICAL SKILLS**

Node.js, C++, C, Python, HTML, Javascript, TypeScript, Git, Data Structures

# **RELEVANT COURSES**

- Algorithms and Data Structures
- Operating Systems
- Web Programming
- Databases
- Machine Learning
- Software Communication & Design

#### **TECHNICAL PROJECTS**

## MAPPERINO (UofT Course Project)

- Programmed with <u>C++</u> with the <u>GTK</u> framework to implement a map system displayed on a Graphical User Interface
- Implemented various optimizations for graph search based on Dijkstra's algorithm and increased quality of result by 30% while meeting the time restriction for search
- Reduced render time for <u>OpenStreetMap</u> data by 50% for faster user interface loading

## **STOCK BLOCK** (Personal Project)

https://github.com/ianyechen/stock-block

- Developed a web application using <u>Angular</u> for getting real-time stocks information with Alpha Vantage API and storing personal transactions history and details with <u>MongoDB</u>
- Worked with <u>RESTful</u> API development, the <u>MEAN</u> stack, and <u>Passport</u> for user authentication

#### **PERSONAL BUBBLE** (Personal Project)

https://github.com/ianyechen/personal-bubble

- Built a web application using the <u>Python Flask</u> framework in aims of having only one platform for multiple purposes including music playlists and reminders
- Worked with YouTube API to allow for user customization with the video playlist

## **AWARDS**

#### NEWHACKS HACKATHON WINNER

Mar 2019 | Toronto, BC

https://devpost.com/software/newhacks2019

- Worked in a team of 4 and developed a smart and automatic plants watering system using <u>Python</u>, <u>Arduino</u> and <u>PySerial</u>
- Implemented the GUI with <u>Tkinter</u> which displayed information about the plant and its water requirements
- Developed the feature of notifying the user via a text whenever the plant needs to be watered

# **EXTRACURRICULARS**

# CLUB PRESIDENT | LEADERSHIP, EXPERIENCE, OPPORTUNITIES CLUB

Sep 2014 – Jun 2018 | Surrey, BC

- Led over 150 members to serve the community by hosting events and having over 15 fundraisers
- Distributed food and clothes to over 90 homeless individuals and donated \$2000+ to local charities