# Tom Zhu

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#### EDUCATION

Carleton University · Bachelor of Computer Science Honours

Sep. 2019 – May 2024 (Co-op)

- Second year standing, 12.0/12.0 CGPA (A+)
- Awards: Entrance Scholarship (\$16,000), Computer Science Award (\$1,000), Deans' Honour List
- Relevant Coursework: Discrete Structures I, Introduction to Mobile Application Development, Introduction to Computer Science I & II, Introduction to Statistical Modeling I, Linear Algebra, Elementary Calculus I

#### EXPERIENCE

#### Project Lead · CU Blueprint

Sep. 2020 – Present

- Produced CRM platform that improves client and application tracking for NPO that provides interest-free loans
- Leveraged React, Flask, PostgreSQL, and Docker to implement accesible Admin Dashboard and Client View
- Coordinated developer team using Agile methodology while acting as main point of contact for NPO

#### Undergraduate Teaching Assistant · Carleton University

Sep. 2020 – Present

- Facilitated weekly tutorials and office hours with over 60 students to assist in comprehension of course material
- Evaluated student work and addressed inquiries in timely manner to ensure relevant and constructive feedback

#### Software Engineering Fellow · Harled Inc.

Aug. 2020 – Present

- Led group of fellows as Team Lead to develop Flight Mapping System to locate aircraft at given point in time
- Implemented processing script to convert flight data to list of coordinate pairs representing Great Circle path
- Constructed interactive dashboard and map in React and Leaflet to display custom visualization of flight travel

#### Peer Mentor · Science Student Success Centre

Jun. 2020 - Present

- Motivated and supported students by holding 1-on-1 mentoring sessions using active listening techniques
- Hosted workshops and events geared towards attaining personal, professional goals and academic success

#### Projects

Carleton Volleyball Club Site | React, Gatsby, GraphQL, MongoDB, Express

zhutom.com/cuvb-source

- Assembled event registration system to improve event attendance, club marketing, and track statistics
- Created Express API to manage club members, events registration, and bulk emailing queried in GraphQL

## Speed Mingling App | Android, Java, WebRTC, Firebase

github.com/zhu-tom/Viber

- Engineered anonymous speed-friending mobile application with video and text chat capability in Android
- Synced video and audio streams using WebRTC P2P by exchanging SDPs and ICE candidates in Firebase
- Designed friend request system to hide private user data until mutual acceptance

#### Fast Food Haven | Python, Flask, JavaScript, jQuery, UIPath

fast-food-haven.herokuapp.com

- Developed web application in 24 hours that serves as encompassing hub for fast food coupons and deals
- Accessed Geolocation and Maps API to attach distance and map links to nearest corresponding franchisee
- Configured Flask API to scrape data from coupon websites asynchonously into dictionaries converted to JSON
- Winner of Best Hack Using UIPath at cuHacking 2020

### **Timetable Generator** | Python, Flask, Javascript, jQuery

carleton-timetable-generator.herokuapp.com

- Designed web application that expedites tedious course registration and timetable creation process
- Deployed UI that displays all possible timetables and instructor ratings given list of course codes and filters
- Prepared REST API in Flask to scrape lectures and tutorials, and enumerated all possible combinations

#### SKILLS SUMMARY

Languages: Java, Python, JavaScript, C, Swift, SQL, GraphQL, PHP

Frameworks & Libraries: Flask, jQuery, React, MongoDB, Gatsby, Node.js, Express, Android SDK, iOS SDK,

WebRTC, Firebase, OAuth, PostgreSQL, MySQL, Docker, Socket.io

Developer Tools: Git, Azure, Jira, Agile, Docker, Google Cloud Platform, Netlify, Heroku