

# Chao Ching (Diana) Chang

☎ (650) 250 - 9523 | ✉ [diana.chang@edu.uwaterloo.ca](mailto:diana.chang@edu.uwaterloo.ca) | 🏠 [DChang87.github.io](https://github.com/DChang87) | 📺 [DChang87](#) | 🌐 [chaochingchang](#)

## Technical Skills

---

**Proficient** Python, Java, C/C++, HTML/CSS, Android Studio, JavaScript, Racket

**Familiar** Tensorflow, Google Apps Script, Firebase, ReactJS, jQuery, Git

## Work Experience

---

**Google** ENGINEERING PRACTICUM INTERN (CODE JAM TEAM)

Mountain View, California May - Aug 2017

- Built a **Tensorflow** model that succeeded in finding more cheating submissions than the existing cheating detection system
- Improved how data is stored and displayed in the cheating detection pipeline (**Flume**-based distributed system) with **C++** and **Python**
- Wrote **Python** scripts to automate laborious and repetitive tasks previously done by the human judges while reviewing submissions
- Worked with **Google Apps Scripts** and the CodeJam Programs team to automate parts of the T-shirt prize distribution process
- Wrote a **Shell** script that backed up all 26 contestant's files over **SSH** every 20-40 minutes at Code Jam World Finals
- Authored and prepared one of the problems best received by the participants in the Code Jam Kickstart Recruiting Contest

**Brave Control Solutions** STUDENT DEVELOPER INTERN (2 INTERNSHIPS)

Windsor, Ontario Aug 2015 & July 2016

- Assisted in creating the first and efficient routing algorithm in **JavaScript** for an automated parking garage project
- Containerized some of the micro-services in the garage project with **Docker**

## Education

---

**University of Waterloo**

2016 - 2021

- **Honours Bachelors of Computer Science** - 85.46% Cumulative Average
- Elementary Algorithm Design and Data Abstraction, Designing Functional Programs, Introduction to Combinatorics

## Projects

---

**EmergiCare**

Hack the North 2016

- Won "Best use of Canadian Open Data", awarded by Canadian Open Data Exchange
- Built an Android Service that fetches and texts a 911 emergency service with the location of the caller as a 911 call is initiated

**LIBestimote**

HackWestern 2

- Android application that utilizes Estimote beacons to improve the check-out process and navigation at libraries
- Integrated the Estimote SDK with the Android application to detect the location of the user

**Snatch n Go**

MHacks: Refactor

- Android application that allows students to pre-order from restaurants, with a web interface for restaurant owners

**SmartMeds**

Hack the North 2015

- Android, Pebble & web project with Firebase that updates a patient's prescription in real time and reminds them to take their medicine

## Leadership Activities

---

**Hack the North** LOGISTICS COORDINATOR

Waterloo, Ontario Feb 2017 - PRESENT

- Led the Logistics team for two weeks when the team lead was unavailable to do so, coordinating all Logistics tasks during this time
- Leading a team of 5 to ensure the smooth and seamless check in of over 1000 hackers from around the world
- Spearheading effort to acquire any hardware resources necessary for hackers to succeed at the event
- Working with peers and vendors alike to deliver custom-built swag in a reliable and timely manner

**MasseyHacks I & II** DIRECTOR

Windsor, Ontario Dec 2015 - May 2016

- Led a team of 14 students to coordinate Canada's first Major League Hacking high school hackathon
- Brought together over 200 high school students across Ontario and Michigan for a 30-hour event
- Reached out to various local and international companies and raised over \$13,000 in sponsorship

**Hour of Code** ASSISTANT/ORGANIZER

Windsor, Ontario & Taipei, Taiwan Sep 2014 - Aug 2016

- Assisted in organizing and executing various Hour of Code events at Vincent Massey Secondary School and in Taipei
- Taught the fundamentals of programming to children of ages 8 to 14 through games to spark interest in computer science

## Awards

---

2016 **CIBC National Scholarship** Largest of 11 national scholarships for exceptional first year students at UWaterloo

2016 **USA Computing Olympiad** Platinum Division (Highest Division)

2016 **Canadian Mathematical Olympiad (CMO) Qualifying Repêchage** Invitation-only qualifier contest for the CMO

2015 & 2016 **American Invitational Mathematics Examination** Invitation-only qualifier contest for the USA Math Olympiad