

# **SKILLS**

# **Proficient**

lava, Native Android development, Python, C++, HTML, CSS, JavaScript, Bash, XML, Scheme (Racket), JSON, Markdown, REST

#### **Familiar**

C, Node, Express, MongoDB, Angular, SQL, Lua, InfluxDB, Locust, AJAX, jQuery, Bootstrap, Pug(Jade), Jekyll

#### Tools

Git, Gerrit, JIRA, Agile, Atom, Linux(Ubuntu/CentOS), Vim, Eclipse, PyCharm, LaTeX, MobaXterm, Windows, Sublime, Android Studio, Eclipse, Canva

#### **Others**

Cryptography, Biology, Biochemistry, Probability Theory, Statistical Analysis

## **Human Languages**

English (Fluent) Mandarin Chinese (Fluent) Japanese (JLPT N2 equivalent) Norwegian Bokmål (Beginner)

## **EDUCATION**

## **University of Waterloo**

Candidate for BCS 2015 - 2020 (Ongoing)

# **AWARDS**

# **Mathematics Global Scholarship**

\$12,000; Awarded to top international students Fall 2015

**Dean's Honours List**, UWaterloo Term Average 87%+ Fall 2015, Winter & Spring 2016

#### 2nd Place in British Columbia

Reach for the Top Tournament; Team qualified for Nationals April 2015

# **National Biology Scholar**

106th/3,000+ Contestants 2014 National Biology Competition

# DADI ZHANG SOFTWARE & WEB DEVELOPER

# **EXPERIENCE**

Gemalto NV | Ottawa, ON, Canada Software Engineer - Agile REST API Team September 2016 - December 2016

- Conducted industry-relevant research on cryptographic algorithms, protocols, and operations
- Worked on plugins for the back-end API framework using C++ and Lua
- Implemented and optimized a new automated regressive test system in Python on the API framework, which reduced total run-time from 5+ hours to 33 minutes and discovered multiple bugs in the build
- Implemented upload, download, and crypto functionalities for the front-end API web using Node.js, jQuery, and AJAX; Improved usability and re-designed UI/UX components for web and desktop clients
- Developed distributed performance load testing scripts in Python (Locust)
- Other tasks included code reviews, scrum and engineering meetings, creating documentation pages, reporting and fixing bugs, and helping fellow co-ops debug and solve problems

University of Waterloo | Waterloo, ON, Canada

January 2017 - Present

Undergraduate Teaching Assistant - Calculus 2 (MATH 138)

# **PROJECTS & HACKATHONS**

**Number Catch** 



October 2016 - Present

Android Studio, Java, XML, Google Text-to-Speech Engine

- An Android application that trains users to be more familiar with numbers uttered in foreign languages
- Designed with minimalist concepts and implemented multiple gameplay modes

Myo Muse | Waterloo Hacks 2016



January 2016

Android Studio, Swift, Java, XML, Node.js • Built the Android client of Myo Muse, a music application that changes the song playing in the Spotify

- playlist to match the user's running pace
- Worked well with 3 other teammates; 1st Place in Waterloo Hacks 2016

**Time Series Visualization** | deCODE Ottawa



October 2016

Node.js, Express, InfluxDB, Angular, Chart.js

- Part of the student team that worked on a data visualization and forecasting project with Klipfolio Inc.
- Implemented data analysis and prediction of future values using regression in Node.js during the hackathon

WatScholarship





January 2016

• Built an Android application that helps UWaterloo students search for scholarship information

• Learned about the Android application lifecycle, API calls, UI design, and JSON parsing

**Personal Site** | dzed.me



November 2015

HTMBuilf-Soldky Affrict lake Magkal Whe Perstand Providing my peers with course notes

• Responsive, minimalist front-end design; Accumulated over 9,000 page views as of December 2016

# **EXTRA-CURRICULAR ACTIVITIES & INTERESTS**

## Go (Board Game)

- 5-Dan player certified in 2009; 7-Dan on Tygem; 1st Place in the 2013 Vancouver Go Tournament
- Have been playing since age 7; Member of the Canadian Go Association and UWaterloo Go Club

## Moderator of /r/uwaterloo

- Democratically elected moderator of the UWaterloo subreddit community of over 11,500 subscribers
- Encourage positive discussions by implementing Wat to Do Wednesdays and Social Saturdays threads
- · Advocate for mental health; Communicate with the University upon seeing potentially suicidal posters

#### Baseball and Soccer (Football)

- Co-founder and President of high school baseball club; Actively organized weekly practices and games
- Baseball: 1B/LF, contact hitter, Draft King participant; Soccer: RB/CM, fan of the Football Manager series

Language Learning, Linguistics, Piano, Tennis, Scandinavian Rock