

# **SKILLS**

## **Proficient**

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

## **Familiar**

C, Node.js, Scala, Express, MongoDB, AngularJS, Lua, InfluxDB, Locust, AJAX, SQL, Bootstrap, Jekyll, MIPS Assembly

#### 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

# DADIZHANG SOFTWARE & WEB DEVELOPER

## **EXPERIENCE**

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

- Built 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 API web client using Node.js, jQuery, and AJAX; Improved usability and re-designed UI/UX components for web and desktop apps
- Conducted industry-relevant research on **cryptographic** algorithms, protocols, and operations
- Worked on plugins for the back-end API framework using C++ and Lua
- 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

# **PROJECTS & HACKATHONS**

Mr. Panino



November 2016 - Present

Node.js, Express, AngularJS, MongoDB, Twinword API, NPM

- A full-stack web application where users can look up words and store vocab lists
- Utilized multiple APIs and Node packages to enhance functionality

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; Supports 16 languages

Myo Muse | Waterloo Hacks 2016 Android Studio, Swift, Java, XML, Node.js





January 2016

- 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 using Thalmic Labs' Myo armband
- Worked well with 3 other teammates; 1st Place in Waterloo Hacks and featured on the Myo dev blog

**Time Series Visualization** | deCODE Ottawa Node.js, Express, InfluxDB, AngularJS, Chart.js



October 2016

- 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

HTML, CSS, JavaScript, Jekyll, Markdown, Bootstrap

- Built a blogging site showcasing my interests and thoughts, and providing my peers with course notes
- Responsive, minimalist front-end design; Accumulated over 10,000 page views as of January 2017

## 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

#### 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, Kendo, Reddit, Scandinavian Rock