Cherry Zhang

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Education

University of Waterloo

Candidate for BaSc. in Mechatronics Engineering & Minor in Computer Science

Expected May 2018 | Waterloo, CA Cum. Average: 91.2%

Engineering Dean's List (Ranked 4th in class of over 130) List of Courses: here

Online Profiles

Github:// phantomkirby LinkedIn:// cherryzhang1995 Blog:// blog.cherryzhang.net Papers:// cherry-zhang

Skills

Software/Embedded

Experienced:

Java • Android • C#

Familiar:

Arduino • C++

Basic:

MATLAB • databases • Python • HTML • JavaScript • CSS

Computer Aided Design

Basic AutoCAD & SOLIDWORKS

Languages

Fluent in English Basic Japanese, Chinese and French

Other

Technical Writing UI/UX Design Research

Work Experience

Microsoft Software Engineering Intern

May 2015 - August 2015 | Tokyo, JP

- Worked on Office Lens, and image processing app that can scan documents, whiteboards, etc. on your mobile device with real-time edge detection
- Worked with making the app from scratch on Universal Windows 10 Platform, from everything including: camera, orientation sensors and rotation & other animations, integration of image processing libraries into the app, optimization of the speed of image processing and the speed of the real-time edge detection, utilizing different video and photo capture resolutions, concurrency, memory optimization and management, image encoding/decoding, OneNote service integration, etc.

Microsoft Software Engineering Intern

November 2014 - December 2014 | Tokyo, JP

- Designed and Implemented various algorithms and a data structure for organizing and generating suggested albums based on photo metadata
- Improved the UI and UX experience on the Android client application, creating custom gesture features and ui elements.
- Implemented other various experimental features for the Sway application

Imaggle Android Developer Intern

August 2014 - October 2014 | Tokyo, JP

- Imaggle is a startup that developed a app for an online clothing market place
- Developed the Android version of the iOS app, and worked with the founder regarding core decisions for the product design
- Functioned as the Android team lead for coordinating tasks and development activities

Research

University of Waterloo Part-Time Research Assistant Expected September 2015 – December 2015 | Waterloo, CA

• Expected to continue last research assistantship during the Fall 2015 study term; improving the current research paper, refining rehabilitative techniques, and implementing learning algorithms/heuristics and data analytics into the current application.

University of Waterloo Research Assistant

January 2014 - April 2014 | Waterloo, CA

- Developed an Android mobile app to assist the rehabilitation of people who have suffered a specific type of stroke (reading disorder alexia sans agraphia)
- Researched and read known literature of attempted rehabilitative techniques and their efficacies; summarized these findings in a research paper
- Independently responsible for the entire software life cycle: research paper on problem, functional specification, design specification, code development, test process, user manual, validation with stroke patient (documentation exceeded 100 pages)

Volunteering

Hackathon/Ideathon Workshop Mentor (2014, 2015)

- available 24/7 at two DMTC Japanese hackathons to help with Android hacks
- mentor at ideathon hosted by Microsoft to promote women in STEM fields

Volunteer at University of Waterloo (2014)

• exposing teenagers to engineering, with several meetings with other coordinators, and programmed a short game to teach teenagers basic optimization

Volunteer at MommyCare (2014-2015)

• volunteering and maintaining web application for startup that helps working women in Japan

Hobbies & Interests

Blogging

• I've blogged about the basics of edge detection, knapsack problem, asymmetric cryptography, but also art, philosophy, and video-games

Independent Learning

• I enjoy doing independent learning on various mathematical topics such as machine learning, edge detection, etc.

European History and philosophy

• Frequently either blog or independently read about what I learn

Real-time strategy video games

 Mostly MOBAs including League of Legends, DOTA 2, and Heroes of the Storm

Side Projects (Full List on my Website)

- HTML Parser (independently created the parsing algorithm while learning coding in 2014)
- Bluetooth System that Prevents Harassment on Japanese trains (Top 5 in TechCrunch Japan Hackathon 2014)
- Multi-Platform Android Fitness Application (with ChromeCast, Mobile, and Wear) (finalists at JPHacks 2014)
- Diagnostic/Rehabilitative Android Health App for Feet Problems (using a sock with pressure sensors and accelerometers, and Pebble Watch as a notification receiver) (PennApps Hackathon 2015)
- Recipe Recommender System using Azure Machine Learning (Hack the North 2015)

Extracurriculars

UW Robotics Team Member

Sept. 2015 and onwards | Waterloo

- Joined the team in the autonomous robot racing division this Fall term
- Expected to ramp up on the current progress of the robot car, and to begin learning Robot Operating System (ROS) and OpenCV

RoboGals - Mentor and UW Branch Founder

June 2015 and onwards | Waterloo & Tokyo

- Creating a local Waterloo branch of the international volunteering organization that helps promote girls and young women to pursue engineering
- Volunteered at the Tokyo branch in Spring 2015 during my internship in Japan; helped organize the event, and was a mentor for the girls and young children, teaching them Lego Mindstorms

Engineering Peer Tutoring Program

April 2015 and onwards | Waterloo

- Initiated a peer tutor program so struggling engineering students can get help from fellow peers
- Leading the project, starting with the upcoming 2B term for the mechatronics class of 2018.

Awards

- 2015 President's Research Award (>= 80% avg. & research assistantship)
- 2014 International Experience Award (>= 80% avg. & international internship)
- 2013 President's Scholarship of Distinction (entrance average of >= 95%)
- 2013 Dr. B. Mabel Dunham Award (Highest Average in High School among Females)
- 2011 Business/Entrepreneurship Award (for Computer Science Studies)
- 2011 Gold Medal in Waterloo Science and Engineering Fair for Biotechnology