Cherry Zhang

Email Website LinkedIn GitHub Blog Papers

EDUCATION

University of Waterloo – Candidate for BaSc. in Mechatronics Engineering with an Intended Minor in Computer Science (2018)

- Cumulative Average – 91.2%
- Engineering Dean's List – Ranked 4th out of over 135 students
- Planning to pursue graduate studies

SKILLS

Software

- Experienced: Java, Android, and C#
- Familiar: C++, C, and Arduino
- Basic: MATLAB, VBA, HTML, CSS, and JavaScript

Computer Aided Design

- AutoCAD and SOLIDWORKS

Languages

- Fluent in English; Intermediate in Japanese; Basic Chinese and French

Other

- Research, Technical Writing, UI/UX Design

RESEARCH

University of Waterloo – Part-Time Research Assistant (September 2015 – December 2015)

- Expected to continue last research assistantship during the Fall 2015 study term;
- Will improve the current research paper (planning to submit to a conference), refining rehabilitative techniques, and implementing learning algorithms/heuristics and data analytics into the current application.

University of Waterloo – Research Assistant (January 2014 – April 2014)

- Worked under the direction of Professor McKay (Dept. Management Sciences)
- Developed a mobile Android app to assist the rehabilitation of people who have suffered a specific type of stroke (reading disorder – alexia without agraphia)
- Researched and read known literature of attempted rehabilitative techniques and their efficacies; summarized these findings in a research paper
- Responsible for the full software life cycle: research paper on problem, functional specification, design specification, code development, test process, user manual, validation with stroke patient (documentation exceeded 160 pages)

WORK EXPERIENCE

Microsoft - Software Engineering Intern – Tokyo (May 2015-August 2015)

- Worked on the Windows 10 version of Office Lens, an image processing app that can scan documents, whiteboards, etc. on your mobile device with real-time edge detection
- I was the sole developer for a majority of this version of this app's features, and developed most of the software design, including: working with the camera and orientation sensor, UI, integration of the image processing libraries, optimization/testing of the image processing and real-time edge detection, concurrency, memory optimization and management, image encoding/decoding, OneNote service integration, fixing bugs, etc.

Microsoft - Software Engineering Intern - Tokyo (November 2014 – December 2014)

- Designed and implemented various algorithms and data structures for generating suggested content in the form of mini photo albums from the user's device's photo album based on the metadata of each photo
- Improved the UI and UX experience on the Android client application, creating custom gestures features, animations, UI elements, etc.

Imaggle – Android Developer Intern – Tokyo (September 2014 – October 2014)

- Imaggle is a startup company that developed an 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

SIDE PROJECTS (FULL LIST ON MY WEBSITE)

- HTML parser (created the parsing algorithm independently in Winter 2014)
- Multi-platform Android fitness application (with ChromeCast/Android TV, Mobile, and Wear) (finalists at JPHacks 2014)
- Diagnostic/Rehabilitative Android health app for foot problems (using a sock with pressure sensors and accelerometers, and a Pebble Watch as a notification receiver) (PennApps Hackathon 2015)
- Recipe Recommender System using Azure Machine Learning (Hack the North 2015)

EXTRACURRICULARS

UW Robotics (September 2015–)

- Joined the autonomous robot racing team this Fall term
- Learning OpenCV and ROS (Robot Operating System)

Engineering Peer Tutoring Program (April 2015–)

- Initiated a peer tutor program so struggling engineering students can get help from fellow peers

HOBBIES AND INTERESTS

- Blogging
    - I have blogged about various subjects including: basic edge detection, knapsack problem, asymmetric cryptography, but also art, philosophy, and history
- Independent Learning
    - I enjoy independently learning about various topics such as machine learning, image processing, European history and philosophy, etc.

VOLUNTEERING

- Mentor at hackathons and an ideathons (Japan – DMTC and Microsoft – Fall 2014)
- Volunteer at University of Waterloo (exposing teenagers to engineering – Winter 2015)
- RoboGals Volunteer (exposing young girls to engineering – Spring 2015 and ongoing)

AWARDS

- 2015 President's Research Award (first year average at least > 80% and for doing a research assistantship during study term)
- 2014 International Experience Award (first year average at least > 80% & international internship)
- 2013 President's Scholarship of Distinction (entrance average of at least > 95%)
- 2013 Dr. B. Mabel Dunham Award (highest average in high school among females)