

Hantong Li

Full stack developer, candidate of B.Sc. in Computer Science, UWaterloo

Waterloo, ON

Email: h324li@edu.uwaterloo.ca Address: 402-49 Columbia St W, Waterloo, ON, N2L 3K4 Tel: +1 (226)929-2065

PROGRAMMING

- Languages: C/C++, Python, Java, Swift, JavaScript.
- Frameworks: Node.JS, Flask, MongoDB, jQuery, Bootstrap.
- Platforms: iOS(XCode), Android (Android studio, ABD), AWS (EC2, Lambda) and Linux.
- Technical: Agile scrum methodology, object oriented programming, and strong algorithm implementation.

WORK EXPERIENCE

Co-founder & Software Developer, Tapplock, Toronto ON 1/2016 – Present

- Responsible for angel fund-raising, database designing, front-end app development and testing.
- Increased Bluetooth data transfer security by implementing an enhanced encryption algorithm.
- Rated “2016 Top 15 Startup companies” by Metabridge and incubated by HAX.
- Received invitation to CES 2017. Website: <http://www.tapplock.com/>

Summer Intern, Software Developer, General Motors, Oshawa ON 5/2016 – 9/2016

- Developed smoke and sanity testing suites for vehicle infotainment system using Automated Test Framework.
- Developed C++ scripts that can auto generate CAN messages, greatly shortened length of test scripts.
- Participated in vehicle safety test with function blocking under different driving modes.
- Acquired agile scrum methodology and development life-cycle.

Summer Intern, Software Developer, SpeechOcean, Beijing 5/2015 – 9/2015

- Developed machine learning data crawlers in Python with query support of keyword, location and language.
- Participated in designing a camera recognizer that can read road signs and traffic lights
- Participated in English and Cantonese voice recognition model.
- Worked on Feiyu Android app, an online outsourcing platform. <http://zb.speechocean.com/>

EDUCATION

Bachelor of Computer Science, Honors, University of Waterloo, Ontario 9/2013 – Present

- Relevant courses include Algorithm Design, Data Structures, MIPS and Compiler, Object-Oriented Programming Operating System, Database Management, Artificial Intelligence, User Interface.

PROJECTS

Goosey: First Learn API of UWaterloo (Since Sept 2016, independent)

- Goosey is a RESTful API that provides endpoints for Waterloo Learn, such as courses' information, announcements, upcoming events, and lecture notes, etc.
- UWaterloo students can authenticate using school credentials.
- Powered by web crawlers using python Flask web framework, deployed on AWS EC2.
- Documentation (HTML + CSS + YAML): <http://api.goosey.ca> ; iOS and Android app under development.

OS161 (4 months, independent)

- Developed a simplified operating system kernel in C to perform fundamental tasks of an operating system including process implementation, memory management and inter-process communication.
- Implemented file descriptors and relevant system calls (open, close, read and write) to transmit file data
- Created process structure and implemented relevant system calls (getpid, fork, waitpid and execv)
- Implemented synchronization primitives (locks, conditional variables and semaphores), system calls, virtual memory system (full TLB, physical memory management, etc.)

AWARDS

- Faculty of Mathematics Entrance Scholarship 9/2013
- University of Waterloo President's Scholarship 9/2013