(Graduated on *2019/05*) Seeking 2019 Software Development Full-Time Position.

Hsuan Han(Edward) Lai

Email: hsuan.han.lai@gmail.com | (206)851-8129 | Portfolio: www.hsuanhanlai.com

Summary
- A confident and creative programmer who is self-motivated in a quickly changing environment.
- Outstanding communication skills in team development or vendors.
- Strong skills in Python, Java, Mobile App Development, and Machine Learning.

Education

2016- 19 **Pennsylvania State University** Bachelor of Science in Computer Science (B.A.) GPA 2.95

2014- 16 **Shoreline Community College** Associate of Arts in Computer Science (A.A)

2011- 14 **National Taichung Industrial High School** Electronic Engineering

Experience

Software Developer Intern *DigiWin Software Co., Ltd. , Taichung, Taiwan*   May 2018- Aug 2018
- Utilized Google Cloud service with industrial use management software.
- Design software for Android users, Implemented back-end database MySQL to provide visualized user interface.
- Developed more efficient algorithms to process all information sent by the PLC industrial system.
- [Android, Java, MySQL, JSON, Google Cloud IoT]

WordPress Developer *Quality Athletics Restaurant, Seattle, WA*   March 2016 - June 2017
- I developed a static webpage with Bootstrap framework for an organization specialized in the fundraising of food.
- Developed a website with high maintainability and scalability, forms utilizing PHP, and deployment of website and hosting.
- [HTML/ CSS/ Javascript, Bootstrap, PHP]

Electronic Technician *Electronic Products Repair, Seattle, WA*   Sep 2013- May 2016
- I provided repair services for a wide range of product types.
- Problem-solving in hardware and software repair, such as PC, mobiles, tablets and OS system. Achieved over 150 pieces of electronic devices fixed

Project

HTML Forge - AI Recognize user hand drawing and convert into code
- Developed custom Tensorflow model recognizes user's hand-drawing and Implemented OpenCV pre-processing unit to cluster and identify objects. Also Designed an algorithm to achieve better time and space complexity in the runtime of a web environment. Link: http://htmlforge.com/
- [Python, Machine Learning, Tensorflow, OpenCV, Computer Vision]

OP-1 Manager - Portable file server for a digital synthesizer.
- Developed software/ hardware device. Capable of backup, upload and decrepit audio and synth patch files on the go.
- Involved Linux (8 sec) boot optimization on RSPi, circuitry design, Media file server via onboard WIFI, and UI design.
- Marketing, parts sourcing, and product production.
  Link: https://github.com/adwuard/OP1_File_Organizer
- [Python, Shell, Linux, Flask, jQuery]

Compiler Design - lexical, syntax, semantic analyzer that will compile and analyze C Minus Language.
- Developed in Java with Bison, JFlex, and YACC framework. With compiler optimization, static analysis, garbage collection, and error detection. Experienced with Context-Free-Grammar and Regular Expressions implementations •
Link: https://github.com/adwuard/minc_lexical-analyzer_syntaxChecker
[Java, C, Compiler, Bison, JFlex, YACC]

Leadership Experience
Engineering Club President *Shoreline Community College, Seattle, WA*   Sep 2014 - May 2015
Founder and Instructor *Creative Robot Design Club, Taichung, Taiwan*   Feb 2012 - April 2013

Awards and Accomplishments:
1st **Penn State Computer Science Capstone Design Conference (Graduation Project)**
1st **Penn State The James A. Andrews Memorial Award for Excellence in Capstone Design Conference**
1st, **American Society of Mechanical Engineering Sumo Robot**
1st, **Race of Automated Computer Mouse (US nationwide)**
Gold Award, **Finland SciFest Science Fairs, Finland**
4th, **International Micro-Robot Competition, Japan**