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

# Hsuan Han(Edward) Lai

Email: <a href="mailto:hsuan.han.lai@gmail.com">hsuan.han.lai@gmail.com</a> | (206)851-8129 | Portfolio: <a href="mailto:www.hsuanhanlai.com">www.hsuanhanlai.com</a>

## **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 2.98
- 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 - Al 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: https://github.com/adwuard/HTML Forge
- [ 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, eventually reaching 1000+ users. 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 Founder and Instructor Creative Robot Design Club. Taichung, Taiwan

Sep 2014 - May 2015 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