

# Ho Wang Lam

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Drexel University, Philadelphia, PA  
Bachelor of Science in **Electrical Engineering** and **Computer Engineering**  
Minor in **Computer Science**

+1 (702) 415-4273  
Graduated - June 2018  
**GPA - 3.33**

## HONORS AND AWARDS

AJ Drexel Scholarship - 2013 – Present

Dean's List, Drexel University - 2014

## EXPERIENCE

### WORK EXPERIENCES

#### Crane Payment Innovation Software Engineer

Aug. 2018 – Current

- Developed dashboard web app to provide analytical data of the running engineering lab
- Developed services interacting with physical instruments and perform automation and data collection to the cloud
- Promoted the team to adopt scalable cloud container and adopting new framework increase work efficiency
- Developed real time embedded application RS3232 communication monitoring and decoding library

#### Halo Labs.

Mar. – Sep. 2017

##### R & D Engineer

- Developed a microcontroller, and supporting circuit PCB for robotic microscope
- Knowledgeable in PCB proto-type debugging and troubleshooting.
- Performed optical calibration in software and hardware Nano size partials imaging
- Developed an intensity-based image registration application for stitching microscopic images
- Developed embedded C code on the microcontroller to control robotic microscopic

#### Rohde & Schwarz Asia Pte. Ltd.

Mar. – Sep. 2016

##### GUI Test Automation Engineer

- Designed and Implemented python test scripts that control EMC testing software written in C#/WPF and communicates with EMC testing system
- Performed system integration testing in EMC chamber and controlled instruments simultaneously
- Experience with Agile development and scrum team across two different time zones

#### EXELON - PECO ENERGY

Mar. – Sep. 2015

##### Reliability Engineer

- Developed a Cost/Performance optimization algorithm using on statistical model for allocation \$200 million proactive replacement project fund spending
- Assisted on emergency response, such as extreme weather conditions and catastrophic scenarios

### PROJECTS EXPERIENCES

#### Office Hours Aficionado **NodeJS** | **MySQL** | **OAuth2**

A prototype mobile web application written in NodeJS integrate with Google Calendar for student to check professor's availability and make appointment.

#### Remote Heart Statues Monitor **Arduino** | **Android App**

- Designed the implemented electric circuit for remote heartbeat sensor in a team
- Developed effective amplification and filtering circuit for the sensor unit
- Processed and realized the data using microcontroller and Bluetooth

#### Seamless Compute

**GWT** | **Java** | **Prototyping** | etc

A personal project turned senior design. The goal of Seamless Compute is to replace all personal computers with a cloud-based computer. Currently under active development.

#### Car Tuning

**Data analyst** | **ECU Programming**

A long-term hobby projects. Every time I go out driving, I logged all the sensors' data, and used that to tune my car's ECU. By tweaking open loop and close loop A/F ratio, ignition timing, VTC, i-Vtec timing and etc, I can gain 15% of power just by software change!

#### Incan Gold

**Java** | **Swing**

A java swing project to mimic tabletop game Incan Gold by Alan R. Moon and Bruno Faidutti. The players are gitadventures who must explore an Incan temple rumored to contain many treasures.

More on: <http://lamho.io>



## SKILLS

### Programming:

**Array Languages:** MATLAB/Octave

**Object-Oriented:** C++, Java, C#, Python, Visual Basic

**Web:** HTML, CSS, JavaScript, Nodejs, GWT

**Functional Programming:** Racket

**Others:** C/Embedded C, SQL, VHDL, Verilog, CUDA

### Language:

Mandarin, Cantonese, English

**Tools:** version control (git, RTC), SQL, build tools (make, maven), .NET, OpenCV, OpenGL, CUDA, OpenMP, SSE, GWT, Google Cloud Platform, AWS, and many more

**Applications:** Creo Parametric, Solidworks, AutoCAD, Modelsim, Microsoft Office, MySQL, Eagle PCB

**OS:** Linux/ Unix, Windows, MacOS, Android

**Hardware:** Oscilloscope, microcontroller and circuit design