

# Halmon Lui

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## SKILLS

**PROGRAMMING:** JavaScript | React Native | GraphQL | Python3 | OpenCV | Scikit-learn | Flask | Bash | Java  
HTML5 | CSS3 | React.js | Vue.js | Node.js | Express.js | Redux | ASP.NET MVC | GraphQL | Arduino | MATLAB  
**SERVER:** NGINX, MongoDB | MySQL | Redis | Firebase | Jenkins | Gitlab CI/CD | AWS | Google Analytics  
**TOOLS:** Git | Vim | Postman | Adobe (Photoshop, Audition) | Solidworks | Cinema 4D | Ableton Live

## TECHNICAL EXPERIENCE

### REGGORA | Full-Stack Developer

September 2019 - Present | Boston, MA

- Create payment endpoints and functionalities in **Python Flask** using **Stripe API**
- Optimize platform from over 2 minutes loading down to sub 2 seconds with **SQS Queue**
- Engineer **Unit Tests** and **Datadog** monitors to ensure platform stability
- Develop reusable front-end components using **React.js** and **Ant Design**
- Perform data migrations in **MongoDB** and efficient queries using **ElasticSearch**
- Frontline on the support team to address highest priority tickets
- Conduct technical and cultural interviews for engineering candidates
- Tech mentor and onboard engineers to begin developing in under a week

### BIOTAKE RESEARCH | Full-Stack Researcher

January 2018 - January 2020 | Boston, MA

- Create **RESTful APIs** and a **NoSQL** Database Model for **MongoDB**
- Apply **Machine Learning** and Multi-scale Entropy to Physiobank's ECG data
- Implement communication between **NGINX**, **Python server** and the **MongoDB**, **Express.js**, **React.js**, **Node.js** (**MERN**) server stack to handle real-time data

### IEEE INTERNATIONAL CONFERENCE ON E-HEALTH 2020 (IEEE Healthcom 2020) | Publication, Speaker

- Halmon Lui, Chen-Hsiang Yu. "System Design for Data Analysis with Multiscale Entropy" IEEE Healthcom'20, Shenzhen, China, December 2020.
- Lead author and presenter for a health conference research paper about pseudo real-time data analysis

### THE 2019 INTERNATIONAL CONFERENCE ON SECURITY AND MANAGEMENT (SAM'19) | Publication, Speaker

- Halmon Lui, Chen-Hsiang Yu. "Security Lessons from Building a Back-End Service for Data Collection." SAM'19, Las Vegas, NV, July 2019.
- Lead author and presenter for a security conference research paper with findings from Biotake Research

### VISIBLE SYSTEMS CORPORATION | Full-Stack Developer

September 2018 - September 2019 | Boston, MA

- Redesign the front-end of the web application using **React.js** on top of **ASP.NET MVC**
- Create **RESTful APIs** to allow communication between a newer product and a legacy product

## HACKATHON EXPERIENCE @ devpost.com/Halmon

### SQUARE SMALL BUSINESS HACKATHON 2020 | Square

- AppointMate - Salon appointment app to optimize the inefficient salon market
- Created **React.js** application and integrated with **Google Cloud Platform** for maps and calendars
- Developed **Python Flask RESTful API server** and **Square Payment API** for customer and payment

### WELLESLEY HACKS 2018 | Wellesley College

- StockFindAR - Discover what companies have stocks using your camera or hololens and view live info
- Created web app with **React.js**, **Serveo** and hosted on **Heroku**
- Worked on the **React Native Augmented Reality** app and **Python Flask RESTful API server**
- Won Kensho Case Study and Algolia Search API awards

## PROJECTS @ github.com/HalmonLui

**MYSAFESTAY** (Python3, React.js, Flask, MongoDB, NGINX, VPS Hosting, GCP, Google Analytics, AdSense)

**AIRBNB API** (Python3, Flask, BeautifulSoup, Selenium)

**BOWLING FORM ANALYSIS COACH** (Python3, OpenCV, OpenPose, Scikit-learn)

## EDUCATION

**WENTWORTH INSTITUTE OF TECHNOLOGY | BS Computer Engineering, Minor in Computer Science**

August 2019 | Boston, MA, 02115