# Timothy Ko

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#### **EDUCATION**

## University of Illinois Urbana Champaign

Bachelor of Science in Computer Engineering – Deans List, James Scholar - 3.75 GPA

Urbana-Champaign, IL

Aug 2016- May 2020

Lynbrook High School

San Jose, CA

4.1 GPA - 35/36 ACT

Aug 2012 - May 2016

#### **WORK EXPERIENCE**

**Spikes Security** 

Los Gatos, CA

Ir Software Test Engineer Intern

June 2015-August 2017

- Developed python stress testing tool that emulates server and customizable user behavior to expedite QA testing. Integrated and implemented web API and a web dashboard for statistics and customization.
- Modified existing software and provided a more user-friendly interface through fixing critical GUI, Javascript, and sound
  related bugs in Python while responsible for managing dependencies and rebuilding the OpenSuse client with RPM
- Performed and documented all levels of testing including performance, functional, integration, system, regression testing.
   Provided management with reports for product release readiness during SCRUM Agile team meetings. Evaluated test cases with TestRail and used Trac/Jira bug tracking system and worked closely with development

#### **ACTIVITIES**

CeleryBox

2017

- IOS app that finds the best grocery store based on user location, their preferences on price and distance and their grocery list
- Spearheaded and architected the development of a REST API with 2 other students. Solely developed the IOS app with a barcode scanner that accessed open APIs and automated web-scraping scripts to acquire and sorted thousands of grocery deals. Helped implement and design the algorithm for best store(Python, Django REST framework, MySQL, Swift 3)

Run4Orphans 2015-present

- Designed, implemented, and maintained the website for both front-end and back-end while assisting the coordination of fundraising events for orphans in third world countries- raised over \$10,000 each year for 3 years through the website
- Included race signups with a payment system, personalized runner profiles, and an admin-only dashboard, etc. (Django, JQuery(AJAX), Wordpress, MySQL, Apache, DigitalOcean)

MechMania 2017

Assisted in coordination and organization of a 24-hour AI hackathon. Designed and developed the event platform and team
dashboard for constant submissions and statistics while helping with the conceptualization of the game. (React, Node.js,
Firebase)

# **EDIDreader Android Application**

2017

• Contracted to develop android application that connects via Bluetooth with a Raspberry Pi to send parsed Extended Display Identification Data(EDID) in JSON and displays and stores it (Python, Java, Android SDK)

### Mafia Party Game Web Application

2017

• Django Web Application that allows enables users to form groups and customizes their game and assigns each user a role, simulating the popular mafia party game (Python, Django, Bootstrap, JQuery, AJAX, MySQL, Heroku)

#### Association for Computing Machinery @ UIUC

2016-present

Taught web development workshops. Active member of largest chapter in the nation. Part of WebMonkeys and SIGAI

#### Technical Blog Publications - www.medium.com/@timmykko

2017-present

Blogs on Django, Node deployment strategies, and different technologies/tools tutorials to help beginners

### **SUMMARY OF SKILLS**

Programming language: Python, Java, Javascript, Swift 3/IOS, C

Web Technology: Django, Node.js, React/Redux, HTML/CSS, Bootstrap, jQuery, Cloud Platforms/Heroku

Others: Linux/Unix Systems, Git, MySQL/PostgreSQL, Docker, MongoDB, Ngnix

#### RELEVANT COURSEWORK

Computer Systems and Programming(C and LC3 Assembly), Analog Signal Processing, Multivariable Calculus, Differential Equations and Linear Systems