# Richard Guan

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Ann Arbor, MI

Expected: April 2021

## **EDUCATION**

University of Michigan

Bachelor of Science in Engineering - Computer Science

GPA: 3.87/4.0

Classes: Algorithms, Data Structures, Introduction to Combinatorics, Accelerated Introduction to Programming, Linear Algebra.

### TECHNICAL SKILLS

Programming Languages: Python, C++, JavaScript, HTML/CSS

Other Technologies: Flask, React, Django, Node, Express, Electron, Unix, Windows, Android, Git

#### WORK EXPERIENCE

Larky Ann Arbor, MI

- Software Engineering Intern

May 2019 - August 2019

- Created functionality for push notifications scheduled by a client for their app users to be editable, a core feature, from a dashboard using Python and React with React Router.
- Worked with Larky's CTO to suggest and implement a way of showing a webview of a financial institution's perks to their users when a notification is tapped with a Flask app sending requests to a separate server instead of creating new endpoints on an old, inaccesible server.
- Added functionality using Java in Android Studio for push notifications sent from Larky's Android library to redirect to any client-specified url in order to fulfill the request of a financial institution client.

Crowds and Machines Lab

Ann Arbor, MI

- Undergraduate Researcher

April 2019 - Present

- Collaborated on a keystroking web text editor using Node.js and Express.js for use in a study, making it work with webpack and migrating to Loopback.js.
- Designed and helped run a study to assess factors that effect the readability of student written code.

180 Degrees Consulting

Ann Arbor, MI

- Business Analyst

January 2019 - Present

- Led UI/UX research efforts for Kiva to improve user retention on their crowd-vetting platform by 3%.
- Wireframed two designs for Kiva's crowdvetting platform in Adobe XD to present to our client, Kiva.

## PROJECT EXPERIENCE

SnapCal Web App — snapcal.richardguan.me

Ann Arbor, MI

- Project Creator

September 2018 - January 2019

- Designed a web app using Python/Django and JavaScript with jQuery that uses computer vision to interpret text from physical fliers to streamline the user experience of adding events to virtual calendars.
- Deployed an alpha version of SnapCal with 80% photo recognition accuracy on Google Cloud Platform.

Laser Tag Android App

Ann Arbor, MI

- MHacks 11 Project Member

October 2018

- Developed an Android app with Kotlin and Android Studio in 36 hours during MHacks 11 to play laser tag in real life using just a phone.
- Applied OpenCV in Java to enable the computer vision the app needed to allow players to "tag" each other by pointing their camera at their opponent's screen and tapping the "shoot" button.

## ADDITIONAL

- Selected for MPowered's Startup High School team to organize a pitch competition that provided access to mentors, resources, and prize money for over 30 high schoolers in Michigan
- As president of Fix N' Give, led a team of 14 people and organized a Computer and Accessories Drive event, collecting over 80 computers from the community in order to donate to local schools in need