

# Richard Guan

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**GitHub:** [github.com/rguan72](https://github.com/rguan72)

## EDUCATION

**University of Michigan, Ann Arbor, MI**

**September 2018 - May 2022**

*B.S.E. in Computer Science, Minor in Mathematics*

*GPA: 3.93/4.00*

Classes: Algorithms, Data Structures, Computer Vision, Operating Systems, Machine Learning, Computer Organization, Theory of Computation, Combinatorics, Elementary Analysis, Abstract Algebra, Statistics, Linear Algebra

## EXPERIENCE

**Citadel**

**Chicago, IL**

*Incoming Fall Software Engineering Intern*

*September 2021 – December 2021*

**Nuro, Inc**

**Mountain View, CA**

*Software Engineering Intern*

*May 2021 – August 2021*

- Cached monorepo in cloud storage bucket with an Airflow DAG, reducing time to clone from 10 minutes to 2 minutes and preventing heavy load exerted on Nuro's GitHub enterprise instance when automated pipelines clone monorepo
- Created internal mirror of external dependencies to make Bazel builds 10% faster and immune to missing dependencies

**Uber Technologies, Inc**

**San Francisco, CA**

*Software Engineering Intern*

*May 2020 -- August 2020*

- Launched feature on Uber Eats home feed, written in Golang, that ranks Eater's most used shortcuts first, resulting in +.3% increase in gross bookings in experiment and making it easier to introduce new verticals (Grocery, Essentials) into Eats app
- Built data pipeline in Apache Hive that aggregates mobile analytics data and disperses to Cassandra for use in current iteration of shortcuts personalization and to support future iterations that will use machine learning
- Wrote and presented design doc discussing need for shortcuts personalization, data pipeline, microservice architecture, alternative architectures, and implementation of project to get endorsements from engineers across Eats

**Kare**

**Ann Arbor, Michigan**

*Co-Founder*

*January 2020 – September 2020*

- Launched app that allows university students to form online support communities with guided sharing exercises and thorough moderation, scaling to 200+ weekly active users and 20,000 impressions to date
- Managed product development cycle of four-person team by scoping features, writing and delegating tasks with GitHub projects, and making core contributions to the app, written in React Native with Firebase Auth and Firestore

**Larky**

**Ann Arbor, Michigan**

*Software Engineering Intern*

*May 2019 – August 2019*

- Led full stack (Node.js, React.js, Android) development of suppressed notifications feature, an urgent client request
- Found and fixed major production bugs in Nudge, including inconsistent user input validation in dashboard's React.js form, incorrect status codes being sent from dashboard's Flask back end, and unnecessary push notifications sent by node-apn from Node.js server to enable an update to be released one week earlier

**UrbanBee**

**Cascais, Portugal**

*Co-Founder*

*July 2019 – October 2019*

- Co-founded a company that creates sensor-integrated beehives for urban beekeeping hobbyists; awarded as a top 10 team at the European Innovation Academy and raised over \$1000 on Kickstarter
- Designed a React Native mobile app to monitor real-time temperature data logged in Firebase by an Arduino in a beehive

## PROJECTS

**Spotify Mixer:** [spotifymixer.com](http://spotifymixer.com)

*December 2020 – January 2021*

- Released website utilizing React, Gatsby, Firebase, and Spotify API that automatically creates curated playlists for groups of people containing their favorite songs, garnering 50+ monthly active users

**EngageMe** (MHacks XII): [bit.ly/Engage-Me](http://bit.ly/Engage-Me)

*October 2019 – December 2019*

- Built back end of Chrome Extension that highlighted the most interesting parts of a YouTube video or lecture recording by viewer engagement, resulting in second place for Best Use of Google Cloud and Finalist for Best Overall at MHacks XII
- Implemented API in Python Flask for aggregating, storing, and retrieving user watch data using Google Cloud Firestore

**Codenames:** [codenames.co](http://codenames.co)

*January 2020 – May 2020*

- Developed real-time room-based word guessing game using React.js, React Router, Firebase Cloud Firestore, Webpack and Storybook that has been played 800+ times by 300+ distinct players

## SKILLS

Python, JavaScript, C++, Go, Node.js, Flask, Express, SQL, React, Firebase, HTML/CSS, Java, Django, Hive, MongoDB