

# Ruihua Sui

rsui2@illinois.edu | (217)-819-2357 | Urbana, IL, 61801 | [ruihuasui.com](http://ruihuasui.com) | [github.com/ruihuasui](https://github.com/ruihuasui)

## Education

**University of Illinois at Urbana-Champaign**

Bachelor of Mathematics & Computer Science

**Graduation Date** May 2020

**GPA** 3.97/4.00

## Projects

### **Opico - Backend Developer**

August 2019 - Now

Joined Data Driven Design Research of Prof. Ranjitha Kumar as an Undergraduate Research Assistant. Developing new features to **Opico** – a social media mobile application that lets people share and discover places through emoji reactions.

- Implemented the API service for Collections which contains a list of users' reactions based on emojis using JavaScript with PostgreSQL, Feathers JS, and Sequelize.
- Gained more than 1000 registered users and generated more than 3700 emoji reactions to a set of more than 2400 physical places. Going to use the collected data to study the implications of Emoji-first communication for future social communications platforms.

### **ClassTranscribe – Leading Frontend Developer**

May 2019 - Now

[classtranscribe/FrontEnd](#)

Designed and built the frontend of **ClassTranscribe**, an educational video website of the University of Illinois launched by Prof. Lawrence Angrave, where provides searchable and editable transcriptions.

This work is supported by a Microsoft Corporation gift to the University of Illinois as part of the 2019 Lighthouse Accessibility Microsoft-Illinois partnership.

- Built all the components for admins, students, and instructors using React JS, Bootstrap, and Redux, and gained over 300 active users in the first month after deployment.
- Implemented a two-screen video player which synchronizes playback of two medias.

### **GoDutch - Backend & Frontend**

July 2019

[WeiliLiu/GoDutch\\_backend](#), [ruihuasui/GoDutch](#)

- Worked in a 4-member team to build a mobile app that enables people to split Walmart shopping bills with friends by using OCR to parse Walmart's electronic receipts.
- Built several screens in frontend using React Native, implemented a part of API services using python and Flask, and wrote several queries to the database using MySQL.

### **Web Games: Simple2048 and Gobang**

May 2019

- Implemented two single-page web apps using React JS in order to learn React. I designed algorithms and UI's for both of the games.
- **Simple2048**: a sliding block puzzle game designed by Italian web developer Gabriele Cirulli.
- **Gobang (Gomoku)**: a 2-player chess game

### **Malloc Contest**

March 2019

- Implemented personal Memory Allocation functions including *malloc*, *calloc*, *realloc* and *free* during a two-week contest held by course CS241 in University of Illinois at Urbana-Champaign
- Completed all test cases and ranked the top 5 percent among 300 contestants.

## Honors & Awards

- James Scholar, *University of Illinois at Urbana-Champaign*
- Dean's List Student, *University of Illinois at Urbana-Champaign*

Spring 2019

2018 - Now

## Highlights

- **Programming Languages** C, C++, Java, JavaScript, Python, HTML5, CSS3
- **Web/Mobile App Development** React, React Native, FeathersJS, Flask, Sequelize, Redux, Bootstrap
- **Database Management** MySQL, PostgreSQL, MongoDB