

Ruihua Sui

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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 Node JS 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 - Frontend Developer

May 2019 - Now

 [classtranscribe/FrontEnd](https://github.com/ruihuasui/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.

- Set up multiple pages for admins, students, and instructors using React JS, and gained over 300 active users after deployed at the end of August.
- Implemented a two-screen video player which synchronizes playback of two medias.
- Collecting data from user actions to study the importance of transcriptions in students' self-learning through watching educational videos.

GoDutch - Backend & Frontend

July 2019

 [WeiliLiu/GoDutch_backend](https://github.com/WeiliLiu/GoDutch_backend), [ruihuasui/GoDutch](https://github.com/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 6 percent among 300 contestants.

Honors & Awards

- James Scholar, *University of Illinois at Urbana-Champaign* Spring 2019
- Dean's List Student, *University of Illinois at Urbana-Champaign* 2018 - Now

Highlights

- **Programming Languages** C, C++, Java, JavaScript, Python
- **Web/Mobile App Development** Node JS, React JS, React Native, Feathers JS, Flask, Sequelize
- **Database Management** MySQL, PostgreSQL, MongoDB