Ruihua Sui

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Education

University of Illinois at Urbana-Champaign   **Graduation Date** May 2020
Bachelor of Mathematics & Computer Science   **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 that synchronizes playback of two videos.

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