

Ruihua Sui

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Education

University of Illinois at Urbana-Champaign
Bachelor of Science, Mathematics & Computer Science

Graduation Date December 2020
GPA 3.97/4.00

Projects

Opico *Backend Developer & Research Assistant*

August 2019 - Present

- Collaborated with Prof. Ranjitha Kumar on Data Driven Design Research.
- Maintained the API service for [Opico](#), a mobile application used to study emoji-first communication in modern society, that allows people to share and discover places through emoji reactions.
- Designed and implemented API's for the new feature *Collection*, a list of emoji reactions based on the user's selection, using Feathers JS and PostgreSQL.
- Analyzed the collected data to study the implications of emoji-first communication for future social communications platforms.

ClassTranscribe *Leading Frontend Developer & Research Assistant*

May 2019 - Present

[classtranscribe/FrontEnd](#)

- Designed and developed the frontend of [ClassTranscribe](#), an educational video website launched by Microsoft Corporation and the University of Illinois as part of the [2019 Lighthouse Accessibility Program](#), using React JS, Bootstrap, and Redux.
- Built a highly accessible video player that synchronizes playback of two videos with closed captions, audio descriptions, searchable and editable transcriptions, and customizable user preferences.
- Implemented functionalities that provide streamlined keyboard accessibility throughout the whole website, and followed the Web Content Accessibility Guidelines (WCAG) to ensure the website is accessible to users with special needs.
- Attracted hundreds of active users and the attention from IT Accessibility Specialists of the University of Illinois that will help extend the user group and lead the website to further application.

GoDutch *Backend & Frontend*

July 2019

[WeiliLiu/GoDutch_backend](#), [ruihuasui/GoDutch](#)

- Collaborated with 4 team members on building a mobile application that enables people to split shopping bills from supermarkets with friends through parsing images of Walmart electronic receipt.
- Implemented the components in *Bill-splitting* screen and *Result* screen for frontend using React Native.
- Designed the MySQL database tables and relations for GoDutch, built API services for the transactions using Python Flask, and wrote parser functions to OCR responses.

Web Games: Simple2048 and Gobang

May 2019

- Implemented a sliding-block-puzzle web game [Simple2048](#), compatible with both computer and mobile browsers, via React.
- Implemented [Gobang](#), also called *Five in a Row*, an abstract strategy board game, for learning basic knowledges about front-end development (using React and Bootstrap).

Honors & Awards

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

Skills

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