

Jonathan Cai

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EDUCATION

Rice University | Houston, TX

Anticipated Graduation: May 2021

- Bachelor of Science in Computer Science; GPA: 3.80 / 4.00

Relevant Courses: Tools & Models for Data Science, Fundamentals of Computer Engineering, Algorithmic Thinking, Intro to Program Design, Computational Thinking, Statistics for Data Science

SKILLS

Programming Languages: (proficient) Python | (familiar) Java 8, Go, JavaScript, HTML, CSS

Frameworks and Tools: Git | Docker

Languages: English (native) | Mandarin (proficient)

EXPERIENCE

Team Developer – RiceApps

Aug. 2018 – Current

- Collaborating with Agile/Scrum team of 7 to build iOS app for campus-wide food delivery platform
- Involved in problem scoping, sprint planning/review, maintaining product backlog, designing epics/user stories, development using **React Native**, **GraphQL**, **MongoDB**

Software Engineering Intern – Sihua Technologies

Jun. 2018 – Aug. 2018

- Redesigned in-house CI/CD pipeline by automating the deployment of product features on local Docker Swarm and Kubernetes clusters triggered by internal Gitlab file changes (**Go**).
- Reduced average redeployment and testing time by 70%.
- Implemented notification system for the existing monitoring feature to notify end clients through WeChat, Gmail, DingTalk, and Slack webhooks (**Go**).

Student Mentor – CoderDojo

Jun. 2018 – July. 2018

- Volunteered on weekends to help 20+ young programmers (elementary/middle-school age) with personal projects or learning basic programming skills (**Python**, **Java**, **HTML**).

PROJECTS

SER Jobs – JP Morgan Chase (Code for Good Challenge 2018)

October 2018

- Created a new application form for a local Houston NGO, SER Jobs (**Python**, **JavaScript**, **MySQL**).
- Used **JQuery** to extract user-inputted information and **Flask** back-end to store data on MySQL server.

News Visualization – AT&T Entertainment Hackathon (Won 3rd Place)

July 2018

- Illustrated a network of political figures related through news articles (**Python**, **JavaScript**, **HTML**).
- Automated web scraping of the latest 70+ news articles from 3 news sources and Google searches.
- Utilized NLTK library to parse articles, used SigmaJS force-directed graph algorithm for frontend.

Part-of-Speech Tagging – Rice University

April 2018

- Built a stochastic tagger using a Hidden Markov Model to tag English words to part-of-speech.
- Conducted experiments to test accuracy, reaching 96% on the testing corpus (**Python**).

RiceSlang – HackRice 7.5

March 2018

- Designed a Slackbot using Slack API that defines university-specific slang words particularly for incoming Rice students (**Python**).

LEADERSHIP AND EXTRACURRICULARS

Jones College Government: Special Services Coordinator, IM Sports Coordinator, Powderpuff Coach
RiceApps | Rice Club Basketball Team | Rice Legalese Club | Rice Computer Science Club