

Alan Yu

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Education

Rice University, Houston, TX

Bachelor of Science in Mathematics

May 2020

Bachelor of Arts in Computer Science, GPA: 4.08

May 2020

Honors: Louis J. Walsh Scholarship in Engineering, top 5% GPA in Engineering Department

Skills

- **Programming:** Python, Java, JavaScript, HTML, CSS, R, Matlab, Bash, Perl, PHP
- **Technologies:** Node.js, App.js, Server.js, MongoDB, Git, Vim, TensorFlow, Jekyll, Ionic

Projects

One Click File Translator (*Aiden's Lab*)

Jun 2018 – Aug 2018

- Created a one-click .hic file translator that covers multiple file formats and environments, making it much easier to compile and visualize raw data collected from genome labs
- Produced dynamic visualizations of the intermediate outputs using Plotly API and d3.js

Twitter-Likes-Who

Mar 2018 – Apr 2018

- Built a web game within 24 hours with a team of 4 members using Bootstrap and Node.js during HackRice
- Collected real-time data from Twitter using Twitter API to enhance the real-world experience for players

Shelper.net

Sep 2017

- Built an API that connects emergency shelters with people who are looking for help during Hurricane Harvey
- Implemented customized Google Map API (JSON and react.js) and visualized the live data on the screen from database (MongoDB)
- Awarded Best API Award by Major League Hacking for creativity and practicality of the app

Customer prediction (*NorthStar Memorial Group*)

Nov 2017 – Dec 2017

- Utilized various machine learning techniques in R to analyze past contracts for the company, then provided a prediction report for the potential customers and their preferences
- Provided detailed suggestions of targeted customers for the company after predicting potential buyers

Relevant Experience

Software Developer Intern

May 2018 – Aug 2018

Victorise, Carlsbad, CA

- Added an interface for choosing biking routes using Material Design + Bootstrap as frontend, Server.js + MongoDB as backend to give users more options and enhance their experience
- Redesigned the IOS interface, making it more succinct and user-friendly using App.js
- Fixed version problems and improved the compatibility of the app

Research Assistant, Bioinformatics

Feb 2017 – Jul 2017

Baylor College of Medicine, Houston, TX

- Processed large-scale DNA data and built a classifier to classify DNA into specific populations with TensorFlow
- Utilized deep learning models (ANN and CNN) with TensorFlow to forecast the phasing process of the DNAs
- Reached accuracy above 90% and presented the best model to medical professionals for further applications in personalized medicines for children

Leadership Roles

Founder, Vice President, *Rice Blockchain Club*

Nov 2017 – Present

- Organized weekly meeting on the topics of blockchain technology
- Reached out to local blockchain communities and invited speakers to panel talks
- Host campus hackathons under topics of blockchain technology