

Zhe(Alan) Yu

Houston, TX 77098 | 713-962-0071 | zy19@rice.edu | <https://github.com/AlanFermat>

Education

Rice University, Houston, TX

Bachelor of Science in Mathematics, GPA: 4.08

May 2020

Bachelor of Arts in Computer Science, GPA: 4.08

May 2020

Honors: Louis J. Walsh Scholarship, President's Honor Roll

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

Relevant Experience

Software Developer Intern

May 2018 - Aug 2018

Victorise (Remote)

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

Teaching Assistant for Honor Calculus

Jan 2018 – May 2018

Rice University, Houston, TX

- Hosted weekly office hours to answer calculus questions for over 40 students
- Facilitated homework help sessions by giving necessary hints and thoughts

Research Assistant, Bioinformatics

Feb 2017 – July 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
- Visualized the results and presented the best model to medical professionals for further applications in personalized medicines for children

Projects

One Click File Translator ([Aiden's Lab](#))

June – Aug 2018

- Created a one-click file translator to Hi-C file using perl
- Produced dynamic visualizations of the intermediate outputs using Plotly API and d3.js

Twitter-Likes-Who (HackRice) <https://github.com/AlanFermat/twitterhigherlower>

Mar 31th – Apr 1st 2018

- Built a web game within 24 hours with a team of 4 members using Bootstrap and Node.js
- Collected real-time data from Twitter using Twitter API

Shelper.net (HackRice) <https://github.com/AlanFermat/Shelper>

Sept 22nd – Sept 24th 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)
- Best API award by Major League Hacking

Customer prediction ([NorthStar Memorial Group](#))

Nov 2nd – Dec 12th 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

Leadership Role

Vice President, Co-founder, 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 talk