

# Alan Yu

2440 North Blvd, Apt 2207, Houston, TX 77098 | 713-962-0071 | imalanyu.com |  
zy19@rice.edu | <https://github.com/AlanFermat>

---

## Education

### **Rice University, Houston, TX**

Bachelor of Science in Mathematics,

Bachelor of Arts in Computer Science, GPA: 4.08

(Expected) 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

## Relevant Experience

### **Software Developer Intern**

May 2018 - Aug 2018

*Victorise*

- 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

### **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
- Reached accuracy above 90% 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 2018 – Aug 2018

- Created a one-click .hic file translator that will cover 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
- Made it much easier to compile and visualize raw data from genomic labs

### **Twitter-Likes-Who <https://github.com/AlanFermat/twitterhigherlower>**

Mar 31<sup>th</sup> – Apr 1<sup>st</sup> 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

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

Sept 22<sup>nd</sup> – Sept 24<sup>th</sup> 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 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

## 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