Alan Yu

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

Education

Rice University, Houston, TX

Bachelor of Science in Computer Science,

Bachelor of Arts in Mathematics, GPA: 3.97/4.00

May 2020

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

Skills

- **Programming:** Python, Java, JavaScript, PHP, Hack, HTML, CSS, R, Matlab, Bash, Perl, SQL
- **Technologies:** Node.js, Server.js, React.js, Git, Vim, TensorFlow, Jekyll, Mercurial

Projects

Satellite Image Segmentation (*Kaggle Competition*)

Feb 2019 – Apr 2019

- Built a UNet-based neural network model that performs road detections in the satellite images
- Ranked top 10 in the Kaggle Competition among 100+ participants

One Click File Translator (Aiden's Lab)

May 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 to facilitate the research of medical professionals in the genome lab

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 Engineer Intern

May 2019 - Aug 2019

Facebook, Menlo Park, CA

- Built a new end-to-end crisis response experience in Facebook Lite making it much easier to use for 300+ million users in developing countries
- Developed new mark-safe flow in the crisis response by adding more interactive features
- Designed and built crisis feed in crisis response page to make it more memory-efficient and more consistent with Android/IOS Facebook main app

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 – 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

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