

ZHENBANG YU

✉ roger_yu@berkeley.edu 🌐 <https://rogeryu1234.github.io/zhenbangyu.github.io/> ☎ (341)-333-8616

EDUCATION

High School Affiliated to Renmin University Of China

Aug 2018 - June 2021

International curriculum centre - AP Program

University of California Berkeley

Aug 2021 - May 2025

Intended Physics & Computer Science

RESEARCH INTERESTS

I am most interested in electrical engineering. I have basic knowledge in both physics and computer science. My favourite part is electronics. Machine Learning can be another thing I am enthusiastic with.

TECHNICAL SKILLS

Programming Languages: Python, Java, CSS, HTML, SQL, JavaScript(limited knowledge), Scheme, \LaTeX
Software & Tools: **Software:** Photoshop, Final Cut Pro, AutoCAD, Sketchup
Packages: Numpy, Matplotlib, Pandas, Scipy, Jupyter notebook
Machine Learning: Scikit-learn, Tensorflow(limited)

RESEARCH EXPERIENCE

Using Machine Learning to analyze pictures of possible interstellar dust

Nov 2021 - Present

Student Assistant

- I work with Professor Zack and Professor Andrew from the Space Sciences Lab. The purpose of this research is to utilize machine learning to find possible interstellar origin of dust particles collected by the Stardust spacecraft.
- Throughout the research, we use Scikit-learn and Tensorflow. We start the research by practicing different sets of data. We try different methods including PCA, NMF, and clustering(KMeans).
- **Still in progress**

PROJECTS

Simulating Changes in Orbital Paths due to Stellar Evolution

Oct 2021 - Dec 2021

- This project focuses on the changes of mass as a function of T, we use our basic knowledge in python, numpy, and matplotlib to make animations of the changing mass.
- **Still in progress**

Using data analysis to determine Particle parameters

Sept 2021 - Present

- This project is done by my group. We find data from the CERN's Open Data and then learn how to obtain the data and analyze them. Finally, we use programming languages and packages to make the cool simulation
- **Still in progress**

WORK EXPERIENCE

Internship in Zhaopin Recruitment

June 2021 - July 2021

Full-Stack Developer

- In one month, I went through everything a full-stack developer will do, from back-end to front-end. I enhanced and acquire knowledge in SQL, HTML, CSS, and JavaScript.
- I worked with a friend. We compared the resume analyzed by the machine using NLP and the original resume; put the errors into categories and then put the data into database. Using data analysis and MySQL to build the database and use JDBC to connect Java code and the database to store the initial data into the database. - We use basic HTML, CSS and JavaScript to build a simple webpage which is designed to store the data user type in, or let the user get specific data from the database. Connect back end and front end using JavaScript and java - The final outcome was in a very good shape

AWARD

- Third Place in 2021 Berkeley Physics Tournament

EXTRACURRICULAR

- Society of Physics Students member
- Playing chess
- Playing guitar and bass