Yihong Song

626-726-1063 | song@yihong.org | linkedin.com/in/yihongs | github.com/michaelsong4399

EDUCATION

Duke University   Aug. 2022 – May 2025
Bachelor of Science, Computer Science & Mathematics (GPA: 4.00)   *Durham, NC*
Related Coursework: *CS201 Data Structures and Algorithms, MATH221 Linear Algebra and Applications*

Riverside High School   Aug. 2018 – Jun. 2022
Advanced High School Diploma (GPA: 4.63)   *Leesburg, VA*
Related Coursework: *Multivariable Calculus, AP Computer Science, AP Physics C, AP Chemistry, AP Calculus BC*

EXPERIENCE

Founder   Apr. 2022 – Present
Blue Dev Discord Bot   *Durham, NC*
- Built Discord bot to help 1500+ Duke freshmen in registering for popular classes
- Utilized DukeHub REST API to send live notifications of course registration openings to individual students
- Implemented personalized course reminders through a PostgreSQL backend hosted on Oracle Cloud

Eastern Section Director   Jan. 2021 – Present
Project Code Foundation   *Palo Alto, CA*
- Collaborated virtually with Bay Area students to host CS discovery workshops for students across the world
- Lectured to 150+ participants on Discord bots, machine learning, and website design
- Mentored programming in Java and Python during 12-hour hackathon

President & Webmaster   May 2021 – Jun. 2022
Riverside High School National Honor Society (NHS)   *Leesburg, VA*
- Led the largest NHS program in Northern Virginia (310 members)
- Facilitated the largest academic tutoring program in Loudoun County (586 tutoring pairs)
- Empowered members to contribute over 6000 annual service hours to the Northern Virginia community
- Communicated directly with Riverside High School administrators in weekly planning meetings
- Directed the first student presentation at Loudoun County Administrative Leadership Team Conference

Intern Instructor   Jun. 2019 – Aug. 2020
STEMteachersNYC   *New York, NY*
- Hosted JavaScript workshop for NYC high school science educators to integrate programming into physics and STEM curriculum
- Led team of 18 interns and educators in testing new curriculum through role plays and hands-on physics experiments

PROJECTS

Starzam | *Python, Tensorflow, Scikit-learn, NumPy, pandas, Matplotlib, Git*   Aug. 2021 – May 2022
- Developed a novel asteroseismic (star-quake) technique to measure stellar properties using light curves
- Implemented fourier analysis and a deep learning neural network inspired by Shazam App
- Connected and collaborated with astrophysics experts from NASA and ESA
- Received category 2nd Place award at Regeneron Science and Engineering Fair (RSEF)
- Continuation of previous year's ML research: Predicting Stellar Activity through Asteroseismic Analysis

Riverside NHS Portal | *Next.js, Firebase, Tailwind*   Jun. 2021 – May 2022
- Built dynamic web app to algorithmically pair NHS members with tutees and community opportunities
- Implemented identity verification through Google OAuth and built personalized profiles with Firebase backend
- Improved volunteering experiences for 300+ Riverside NHS members, officers, and administrators
- Collaborated with Loudoun County Department of Digital Innovation for project certification

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, HTML/CSS
Libraries/Frameworks: React, Node.js, Next.js, Tailwind, Firebase, MongoDB, TensorFlow, Scikit-learn, Discord.py
Developer Tools: Git, VS Code, Vercel, Google Cloud Platform, Oracle Cloud, Docker, Figma, Maya
Foreign Languages: English (Native/Bilingual), Mandarin Chinese (Native/Bilingual), French (Limited Working)