

Yihong Song

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EDUCATION

Duke University

Bachelor of Science, Computer Science & Mathematics (GPA: 4.00)

Aug. 2022 – May 2026

Durham, NC

Riverside High School

Advanced High School Diploma (GPA: 4.63)

Aug. 2018 – Jun. 2022

Leesburg, VA

EXPERIENCE

Lead Developer

Blue Dev Discord Bot

Apr. 2022 – Present

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

Project Code Foundation

Jan. 2021 – Present

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

Riverside High School National Honor Society (NHS)

May 2021 – Jun. 2022

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

STEMteachersNYC

Jun. 2019 – Aug. 2020

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 astero seismic (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 Astero seismic 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

Soft Skills: Communication, Leadership, Creativity, Time Management