

EDUCATION

Bellaire High School | Houston, TX
Unweighted GPA: 3.98/4.00 & Weighted GPA: 4.9/5.00
Class Rank: 28/660 (Top 4.2%)

May 2024

Boston University | Boston, MA

EXP May 2028

RESEARCH EXPERIENCE/WORK EXPERIENCES

Teacher & Helper | Houston, TX
The Houston Dragon Academy

June 2024 - August 2024

- Taught 3rd & 4th Grade English and Algebra 1
 - Led and supervised various recreational and educational activities, including the game room, sport classes (basketball, soccer, tennis, etc.), outdoor games, and robotics classes.
 - Ensured the health and safety of all campers by adhering to and enforcing camp safety protocols and guidelines.
 - Stepped in to assist with various tasks and activities whenever the need arose, ensuring smooth camp operations and a positive experience for all campers.
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Data Science Intern | Houston, TX

June 2023 – Nov 2023

MD Anderson's Department of Bioinformatics and Computational Biology

Under Dr. Philip Lorenzi and Dr. Iqbal Mahmud

- Analyze and visualize different types of metabolomics data to explore metabolic pathways, networks, and off-target drug effects. Used software tools like Cytoscape, mixOmics R package, and TOXcms.
 - Worked with a cross-functional team including biologists, data analysts, and mass spectrometry experts from MD Anderson Cancer Center and Agilent Technologies, providing exposure to the workflow from experimental design to data generation to data analysis.
 - Test whether multi-omic workflows are applicable to clinical research in the “Multi-omics Pathway Discovery for Biological Insights using Comprehensive LC/TQ Omics Workflows” project, which demonstrates how multi-omics data from mouse models can be integrated to assess drug toxicity and gain biological insights.
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QuERY (Quantum Engineering Research and You) Program

February 2023 – May 2023

Under Harvard PhD Candidate Scarlett Yu

- Applied machine learning methods on the 2D Ising model to predict critical temperatures/conditions for phase transitions through Python and Tensorflow
 - Project Poster: Predicting the Critical Temperature of the Ising Model
https://docs.google.com/presentation/d/1ICe1CHxuDR9GvBrpDzdLLWKzTI09wAVMbT_vV4ngtzo/edit?usp=sharing
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Summer Intern | Houston, TX

July 2022 – August 2022

MD Anderson's Department of Bioinformatics and Computational Biology

Under Dr. Philip Lorenzi

- Examined the synergistic anticancer effect of a combination of L-asparaginase and IACS10759/Metformin against UV melanoma cancer cell lines through a wet lab experiment.
 - Cleaned raw data from the experiment and analyzed data using Excel to determine effectiveness of treatments.
 - Subcultured cancer cells for experimental usage.
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EXTRACURRICULARS

Bellaire Computer Science Club
Vice President (2023 - Present)

2020– Present

- Gave presentations to club members on topics surrounding data structures and algorithms.
- Crafted meeting plans, delegated tasks, facilitated club advertising, and helped organize competitions.
- Lead discussions surrounding coding problems to prepare club members for competitive programming competitions.

AYLUS (Alliance of Youth Leaders in the United States) Bellaire Branch

2021 – Present

Co-Founder and Event Coordinator

- Coordinated weekly volunteer events for the 100+ members in the organization.
- Organized 2 book drives (200+ books) and 2 fundraisers that raised over \$600.
- Wrote reports for the organization.
- Branch of the Month: 2021 (Oct & Dec), 2022 (Mar, Jun, Jul, Aug, & Oct), and 2023 (Jan & Jun). Branch of the Year 2022-2023.

First Robotics Competition (FRC) Robotics Team Impact 2585

2022 – Present

Builder & Programmer

- Designed and assembled Impact 2585 FRC robot's drivetrain, arm, and intake.
- Programmed the Robot's intake using the WPILiB Java library.
- On the Impact 2585's finance team; helped raise \$15000+
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AP Computer Science A Class Teacher's Assistant

2023 – Present

- Dedicated a daily class period to support the AP CSA teacher by grading assignments, quizzes, and exams
- Provided one-on-one tutoring to students seeking further assistance and clarification on computer science-related topics

Chinese Honor Society

2021 – 2023

Technician (2022 – 2023)

- Organized a luncheon fundraiser event by creating a Google sheet that automatically tracks cash flow and Google form to create an efficient way to keep track of food orders. Raised over \$750.
- Hosted yearly events such as a Chinese talent show, Chinese dance competition, Mid-Autumn Festival celebration, Chinese New Year celebration, and annual banquet.

Debate Team

2018 – 2022

- Lincoln Douglas Debate (LD) from 2018 – 2020.
- JV/Varsity Public Forum Debate (PF) from 2020 – 2022. (Degree of Special Distinction)

Boy Scouts Troop 46 | Houston, TX

2017 – Present

- Star Scout; 14 Merit Badges Earned In Total; helped raise \$22000+ through brisket fundraisers
- Troop Guide (2023-Present) Librarian (2022 –2023), Patrol Leader (2019-2020), Quartermaster (2020)

COURSEWORK & SKILLS

Relevant Coursework: AP Computer Science A, AP Computer Science Principles, AP Statistics, AP Physics 1, AP English Language, AP World History, AP US History, Pre-AP Biology, Pre-AP Chemistry, Pre-AP Pre-Calculus

AP Exam Scores: AP World History: 5/5 (2022), AP Chinese: 5/5 (2022), AP Computer Science Principles: 5/5 (2022), AP Computer A5/5 (2023), AP US History: 5/5 (2023), AP English Language and Composition: 5/5 (2023), AP Statistics: 5/5 (2023)

Programming Languages: Java, C++, R & Python

Dev Tools/Software Tools: Git, Cytoscape (STRING APP and Metscape), Microsoft Office Suite (Excel)

Languages: English (Native), Mandarin Chinese (Fluent)

ACCOMPLISHMENTS

- **2nd Place** in the Advanced Division of HackerRank's Competitive Programming Competition at Seven Lakes HS (2023)
- **3rd Place** in the Advanced Division of HackerRank's Competitive Programming Competition at Clements HS (2022)
- Bronze President's Volunteer Award for 100+ Hours Of Service (2023)
- AP Scholar With Distinction (2023) & AP Scholar (2022)
- **3rd Place** in Varsity PF Debate at Mayde Creek Ram's Classic TFA Tournament (2022)
- **3rd Place** in Varsity PF Debate at Spring HS Tournament (2021)
- **Quarter Finalist** in Varsity PF Debate at Memorial HS Tournament (2021)
- **Quarter Finalist** in Novice PF Debate at The Big Cat Swing Tournament at Cy Fair/Cy Creek HS (2020)
- **Quarter Finalist** in Novice PF Debate at Clear Falls HS Tournament (2020)

VOLUNTEERING

- Ed White Elementary School Tutor (120 hours, June 2022 – Present)
 - **Tutored 30+ students (grades 2-5) in various topics surrounding English & mathematics.**
- West U Baptist Church Vacation Bible School Volunteer (20 hours, June 2021)
- Books for Development (9 hours, 2022)
- Divine Missionaries (6 hours, 2022)
- Troop 46 Eagle Scout Project Volunteering (4.5 hours, 2022)
- Undies for Everyone (4 hours, 2022 – 2023)
- Nature Discovery Center (4 hours, 2022 – 2023)
- Chinese Community Center Lunar New Year Event (4 hours, 2023)
- Houston Dragon Academy (3.5 hours, 2022)