rw8166@princeton.edu 832-833-9364

**EDUCATION:** 

Princeton University Princeton, NJ

B.S.E in Computer Science with a Minor in Quantitative Economics

Relevant Coursework: Algorithms and Data Structures, Multivariable Calculus, Intro to Microeconomics

Clear Lake High School GPA: 5.95/5.00 SAT: 1600 Houston, TX

Valedictorian in class of 582

May 2024

May 2028

Recognitions: United States Presidential Scholars Candidate, Houston Mayor's Office of Education and Youth Engagement Certificate of Commendation, National Merit Finalist, President's Volunteer Service Award Silver

#### **EXPERIENCE:**

Tietronix Software Inc., Software Engineer Intern

June 2024 – Aug. 2024

- Developed machine learning models in Python that accurately segment lumbar spine MRI and CT scans
- Developed different GANs to synthesize MRI and CT spine images
- Integrated new model architectures to overcome limited medical data
- Boosted company's progress towards enhanced medical machine learning services

#### **CLUBS & ORGANIZATIONS:**

## **UNICEF Child Friendly Cities Initiative**, *Youth Ambassador*

Aug. 2022 – Current

- Designed and filmed a 7-episode children's rights podcast, Another Step for Youth
- Co-authored a review paper on the impact of neurotechnology on human rights for *The Office of the United Nations High Commissioner for Human Rights (OHCHR)*
- Hosted 3 advocacy trainings for youth empowerment and community involvement (100+ attendance)
- Helped Houston receive UNICEF's recognition as the first 'Child Friendly City' in the US

#### Math National Honor Society, Co-President

Aug. 2020 - May 2024

- Directed weekly math club meetings and taught lessons on topics such as Number Sense and Combinatorics
- Organized Freshman Orientation recruitment booth, boosted membership to all-time high (60+)
- Hosted monthly Math League contests

## **DECA**, Business Club, President

Aug. 2020 – May 2024

- Coordinated a district-wide networking campaign for increased outreach and collaboration
- Hosted business masterclass sessions to mentor students for both the district and state competitions
- Planned the yearly club schedule and led monthly club meetings

## Programming Club, Software Director

Aug. 2021 – May 2024

- Planned the learning curriculum and taught weekly Python programming sessions
- Direct semester-long app development and medical machine learning projects
- Engage middle school students with programming

#### **RESEARCH & ACTIVITIES:**

# University of Houston Mohan Lab, Research Intern

June 2023 – May 2024

- Researched different biomarkers and their spatial expressions in Lupus Nephritis kidneys to predict disease severity
- Created a novel Python co-localization analysis to improve future research methods
- Presided over 10 high school researchers' progress by providing feedback and guidance
- Presented research in joint laboratory meetings
- Co-author a research paper and contribute to a grant application

## Moody Gardens SAVY, Volunteering Program, Lead SAVY

June 2022 – Aug. 2023

- Raised \$6000+ for the Association of Zoos and Aquariums Saving Animals From Extinction Program (AZA SAFE)
- Mentored youth volunteers in presenting interactive displays to guests to inform them about endangered species and wildlife conservation
- Worked closely with biologists to develop an endangered species educational youth program
- Led 5 educational program trips (30+ youth) to protect wildlife

## **HONORS & AWARDS:**

2022, 2023	US National Chemistry Olympiad Top 150 Finalist (Honors)
2024	USA Physics Olympiad Bronze Medalist
2023	International Research, MathWorks Math Modeling Challenge Honorable
	Mention (Top 6%)
2021-24	American Invitational Mathematics Examination (AIME) Qualifier
2023	USA Computing Olympiad Silver
2024	DECA International Career Development Conference (ICDC) Qualifier