

Rahil Mahmood

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EDUCATION

Frisco High School, Frisco, TX
Anticipated May 2025
Unweighted GPA: 3.978/4.0
Weighted GPA: 5.189/ 5.0

HONORS

National Merit Commendation
AP Scholar with Distinction
National Honor Society
Spanish National Honor Society
Science National Honor Society

Internships & Work Experience

CVRLE Internship with Texas A&M, Officer of Intern Team Aug 2024 - Present
Work directly with faculty at A&M to lead a local team in designing lessons for Collaborative Virtual Reality Learning Experiences (CVRLE) for use in K-12 classrooms. Learn Unity from industry professionals and interview local educators to boost student engagement and increase learning objective retention.

Rolfson Compression, Engineering Intern Jun 2024 - Aug 2024
Learned softwares such as SOLIDWORKS and Compress to design machines and vessels for sale and internal conceptualization. Worked under the direction of the company president; boosted machine shop efficiency through workflow documents, aided in quality control and documentation for ASME certification.

MyEventBazaar, Sales Jun 2024 - Aug 2024
Contract position for event planning start-up; cold called potential clients to increase platform utilization; created detailed call sheets for the sales team. Worked closely with developers to ensure accurate representation of unique product offerings.

ArchiTech, General Intern Jul 2022, Jul 2023
Architecture design and development internship; shadowed different positions in the organization and handled small scale design challenges. Engaged with industry professionals to explore potential career opportunities.

EXTRA CURRICULAR INVOLVEMENT

TEDxFrisco HS Youth, Operational Executive for Founding Team Aug 2023 - Present
Facilitated 50+ speaker auditions to uplift community voices on a platform of 40+ million. Handled logistical issues in ticketing and admittance of audience. Supported organization of 30+ volunteers to create a successful event. Resulted in our talks being posted to the TEDx Youtube channel.

Young Men Service League (YMSL), President, Class of '25 May 2022 - Present
Led chapter in community volunteering resulting in 3900+ volunteer group hours last year; Promoted leadership and philanthropic ideals in peers; facilitated meetings to explore leadership qualities. Boosted engagement through organizing meeting activities, guest speakers, and insightful conversations.

NASA, Texas High School Aerospace Scholars, Student Oct 2023 - Jan 2024
Excelled in rigorous coursework to learn and engage with NASA careers. Exposed to opportunities in the aerospace industry; explored essential principles relevant to the future of the industry.

NASA Moonshot, Systems Engineer Jun 2024
Led a team of 11 student engineers in a week-long lunar mission challenge hosted by NASA; organized meetings between 10 fellow team leaders representing a total of 100 peers. Resulted in cohesive final mission and exceptional lunar base design.

A&M Aerospace Camp SOAR, Special Recognition for A&M values Jun 2024
Attended classes with Aerospace professors Dr. Valasek & Dr. Selva; worked on space mission design; experienced student life, toured laboratories and student organizations such as the Sounding Rocketry Team.

CORE Construction Management 101, Special Recognition for Exemplary Presentation Jul 2024
Invited to be part of this opportunity by my district; Exposed to opportunities within construction by industry leaders,

toured active sites, and discussed construction trends to gain insight into all facets of the future of the field. Presented conclusions to 30+ students and construction managers.

Seeking Wells, Lead Organizer

Jun 2024

Aided in hosting and raising \$1,000 towards building wells in areas suffering from lack of clean water, organized and ran the fund-raising activities to gain support and contributions from patrons.

Rice University Elite Summer Tech Camp

Jun 2023

Gained certification in Internet of Things and Robotic Engineering; engaged with Rice students & faculty; experienced on campus student life.

Student Council, Member

Aug 2023- Current

Help organize student events and direct student volunteers to optimize event preparation; collaborate with fellow council members and teachers to represent the student body. Resulted in successful facilitation of events for student engagement and student council fund-raising

SPORTS

FC Dallas Soccer Association, Competitive Club Level

Aug 2021 - May 2024

Frisco High School Soccer, Varsity

Aug 2021 - Present

Frisco High School Cross Country, Varsity

Aug 2024 - Present

PROFICIENT ENGINEERING SOFTWARES

- **Computer Aided Design (CAD) & 3D Modeling**, Model projects for engineering projects
 - *AutoCAD, Inventor, SOLIDWORKS, Fusion 360*
- **Simulation and Analysis**, Simulate Vessel and Bridge design and collect data regarding feasibility and safety
 - *Compress, Bridge Designer*
- **Space Mission Design**, Modeling and Analyzing space missions, orbit paths, and communication systems
 - *Systems Tool Kit (STK), General Mission Analysis Tool (GMAT)*
- **Virtual Reality/3D Environments**, Game engine for 3D scapes
 - *Unity*
- **Building Information Modeling (BIM)**, Detailed 3D Models and Construction Documentation
 - *Revit*

RELEVANT COURSEWORK

Engineering Design & Development

Aug 2024 – Present

Full year design project to solve real world problems; work through engineering process with aid from industry professionals to create working collusion. Present final project to board of engineers for scholarship opportunity. Project in progress: Smart Window to reduce energy consumption, reduce glare, and increase home privacy.

Civil Engineering & Architecture

Aug 2023 – Jun 2024

Learning important aspects of building and site design and development. Apply math, science, and standard engineering practices to design both residential and commercial projects using 3D architecture design software. Led team of 25+ in end-of-year project to create a moon base design; presented to leaders of Space Architecture industry.

Principles of Engineering

Aug 2022 – Jun 2023

Exploration class through diverse engineering fields such as product design, mechanical design, infrastructure, and sustainability. Used cutting edge tools used in robotics, 3D modeling, programming, and prototyping.

Introduction to Engineering Design

Aug 2021 – Jun 2022

Learned engineering design process; apply math, science and engineering standards to hands-on projects such as building and improving existing products.

Other Relevant Courses:

AP Calculus AB, AP Physics 1, AP Calculus BC, Computer Science III, AP Physics C: Electricity, Magnetism, Mechanics