Raheel Nazir

Lutherville-Timonium, MD

J 443-824-0604 **☑** <u>rah.naz@hotmail.com</u> **in** linkedin.com/raheeln **۞** github.com/portfolio

Education

University of Maryland Transfer Program

Bachelor of Science in Mechanical Engineering

Expected May 2027

College Park, MD

Community College of Baltimore County

Associate of Science in Engineering

Jan. 2023 – Present

Essex, MD

- President's List Recipient Winter 2024 GPA: 4.00
- Dean's List Recipient Spring 2024 and Summer 2024 GPA: 3.70 and 4.00
- Digital Fabrication Lab Professional

Louisiana State University

Bachelor's of Science in Engineering

Aug. 2023 – Dec. 2023

Baton Rouge, LA

• Dean's List Recipient — Fall 2023 — GPA: 3.60

Technical Skills

Technical Skills: AutoCAD, Excel

Programming Languages: MATLAB, HTML/CSS

Projects

Tire Force Model Nov. 2024

- Studied a real-world application of multi-variable calculus involving Pacejka's Magic Formula, which models the forces acting on a car's tires.
- Implemented the formula in MATLAB, using actual tire data to calculate lateral and longitudinal forces in different conditions.
- Validated the results by comparing them to empirical tire test data, ensuring accuracy in force predictions.

Spacecraft Design & Analysis

Apr. 2024

- Designed a spacecraft the size of a U.S. aircraft carrier using AI-driven tools.
- Modeled the spacecraft in **AutoCAD**, adhering to industry-standard tolerances and geometric dimensioning to ensure precision and reliability.

24 Hours of Lemons | Endurance Racing Competition

Oct. 2023

- Restored and modified a 1966 Dodge Coronet to compete in an endurance race while complying with a \$500 budget.
- Installed and repaired engine components to ensure the vehicle was race-ready.
- Collaborated with others to source affordable parts and optimize vehicle performance.

Extracurriculars

TigerRacing FSAE

Fall 2023 - Winter 2023

Louisiana State University

Powertrain/Chassis Technician

- Assisted in the design and development of engine components using CAD software.
- Helped assemble and fit parts of the car's chassis, ensuring they met competition requirements.
- Provided general support across stages of the car-building process in a fast-paced team environment.

Hiking Club

Event Coordinator

Spring 2025 – Present

Community College of Baltimore County

Organized and led hiking events, coordinating logistics and ensuring participant safety.

- Managed communication between club members and local parks services to facilitate group sessions.
- Developed promotional materials and social media content to increase club engagement.

Experience

Al Kareem School

May 2022 - Present

Teacher

Lutherville-Timonium, MD

- Provided individual support to 50+ students, adapting teaching techniques to meet various learning styles.
- Supported classroom management and activities, ensuring a positive and productive learning environment.