

Malik Choset

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EDUCATION

Carnegie Mellon University

B.S. in Mechanical Engineering

GPA: 3.75

Pittsburgh, PA

May 2029

Fox Chapel Area High School

GPA: 4.34/4.00 (Top 10%)

Relevant Coursework: AP Physics C: Mechanics (5), AP Calculus BC (5), AP Statistics (5), AP Physics C: E&M (4)

Pittsburgh, PA

June 2025

SKILLS

CAD & Simulation Tools: SOLIDWORKS, Ansys Workbench, Luminary, Fusion 360

Programming: MATLAB

Collaboration Tools: Slack, Microsoft Office, Google Workspace

EXPERIENCE

Carnegie Mellon Racing

DRS Sub-System Lead

Pittsburgh, PA

August 2025–Present

- Designed and implemented a Drag Reduction System (DRS) in SOLIDWORS by implementing a 4-bar linkage mechanism, enabling the rotation of the rear wing airfoil to create desired drag
- Validated the system's aerodynamic performance by running CFD simulations in Luminary and using MATLAB for calculations, confirming correct rotation of the secondary and tertiary element and adequate torque delivered from servo
- Designed DRS enclosure mechanism in SOLIDWORKS and validated performance in FEA (Ansys Mechanical)

CMU Robotics Institute

Research Assistant

Pittsburgh, PA

June 2025–August 2025

- Developed a new force-sensing gripper/foot module for a modular robot system (EigenBot) by utilizing a compressible structure with an internal magnet, which created new force feedback capabilities for locomotion and grasping
- Informed design decisions and ensured structural integrity by conducting stress simulations with Ansys Mechanical
- Built a five-axis 3D printer to serve as a testing platform for conformal additive manufacturing

Fox Chapel Area School District

Summer Custodian

Pittsburgh, PA

June 2022–August 2024

- Maintained cleanliness across all six schools during summer months

LEADERSHIP EXPERIENCE

Fox Chapel Area High School Pickle Ball Club

Vice-President/Co-founder

Pittsburgh, PA

September 2022–June 2025

- Grew club membership to 300 students (~1/4th of school size)

Fox Chapel Area High School Track & Field

Captain

Pittsburgh, PA

March 2025–May 2025

- Led team to finalist placements at state-level competitions