



EDUCATION

Bachelor of Science, Case Western Reserve University (expected: 2027)

- Mechanical Engineering and Aerospace Engineering, minor in Business Management

GPA: 3.1

CERTIFICATIONS & AFFILIATIONS

Certified SOLIDWORKS CAD Design Associate (CSWA), (2024)

American Institute of Aeronautics and Astronautics (AIAA) - Member, (Current)

American Society of Mechanical Engineers (ASME) - Member, (Current)

SELECT EXPERIENCES

American Football, Case Western Reserve University, GBN HS, Carol Stream Panthers (July 2015 – Current)

- Playing since 5th grade, currently a varsity Defensive End for Case Western Reserve University
- Exhibit strong teamwork and clear communication in high-pressure and fast-paced situations
- Lead and mentor teammates in improving techniques, strength, and skills

Lab Teaching Assistant for Circuits and Instrumentation, Case Western Reserve University (August 2025 – Current)

- Lead weekly lab sessions and assisted students with circuit building, analysis, lab instruments, and Multisim
- Graded lab reports and proctored quizzes; reinforced circuit analysis and accuracy in calculations
- Supported learning through office hours and review sessions focused on circuit theory and troubleshooting

Project Manager for Dual-Axis Solar Tracking System Course Project, Case Western Reserve University (January 2026 – Current)

- Overseeing planning, coordination, and alignment with performance and design requirements

CWRU Football Service Committee, Case Western Reserve University (March 2025 – Current)

- Collaborate with team members to introduce ideas, and organize events and functions for the community and for the team
- Promote team involvement, representing the university in events and community services beyond the football program
- Lead team bonding activities to strengthen relationship, boost morale and improve overall performance

CWRU Liquid Propulsion Team, Case Western Reserve University (September 2025 – December 2025)

- Club to design, build, test, and analyze liquid-fueled rocket engines

SELECT PROJECTS

Personal Project - 3D Printed Lightsaber, (January – February 2025)

- Accurately measured and scaled an official LEGO Star Wars lightsaber hilt to human proportions preserving design details
- Created a precise 3D model in SolidWorks, replicating the original piece at full scale, then 3D printed the final design

Invention Project, Case Western Reserve University (September – December 2024)

- Completed a multi-phase design project focused on solving real-world problems through invention and prototyping
- Prototyped and developed a functional hand stabilizer designed to assist individuals with mild tremors in writing tasks
- Collaborated with teammates to refine and prototype ideas, maintaining design consistency

Hammer Manufacturing Project, Case Western Reserve University (August – December 2024)

- Produced a fully functional metal hammer featuring counterbore, countersink, grip, texture, and custom labeling starting from raw 20-foot metal stock using manufacturing processes independently in machining environments
- Achieved a perfect score on final product quality and tolerance testing

SELECT CLASSES & LABS

Aero/Gas Dynamics, Aerostructures, Control of Mechanical Systems, Fluid Mechanics, Strength of Materials, Modern Physics, Thermodynamics, Design and Manufacturing I, Computers in Mechanical Engineering, Circuits and Instrumentation

TECHNICAL & ENGINEERING SKILLS

SOLIDWORKS (CSWA Certified), MATLAB (data analysis, scripting, visualization), Multisim (circuit simulation & analysis), Circuit Design, Analysis & Instrumentation (oscilloscopes, multimeters, function generators), Mechanical Design & 3D Modeling, Engineering Drawing & Blueprint Interpretation, GD&T & Tolerance Analysis, Manufacturing Processes & Machining (Milling, Lathe, CNC), Assembly Line Operations & Workflow, Process Improvement & Lean Manufacturing Principles, Root Cause Analysis & Failure Analysis, Preventative Maintenance Concepts, Equipment Inspection & Technical Documentation, BOM (Bill of Materials), Fluid Mechanics, Thermodynamics & Heat Transfer, Stress & Structural Analysis, Aerodynamics & Gas Dynamics, Aerostructures, Control Systems, Experimental Testing & Validation, Hardware Testing & Development, Design Validation & Verification (V&V), Data Collection, Analysis & Reporting, Systems-Level Thinking

PROFESSIONAL SKILLS

Team Collaboration & Cross-Functional Communication, Leadership & Mentorship (TA + Football), Accountability & Ownership, Dependability & Consistency Under Pressure, Reliability in Team-Based Environments, Problem Solving in High-Pressure Environments, Adaptability in Fast-Paced Settings, Strong Work Ethic & Discipline, Clear Technical Communication, Attention to Detail & Precision, Time Management & Organization, Initiative & “Can-Do” Attitude, Continuous Improvement Mindset, Resilience & Persistence Through Challenges

VOLUNTEER WORK

CWRU 5K for Special Olympics & Tour Guide for Football Recruits, Case Western Reserve University

Youth Football Camp, GBN HS (July 2019, 2021, 2022, 2023)