

Atharva Joshi

(814)-862-8107 | atharva0228@gmail.com | linkedin.com/in/atharvajoshi2026 | atharvajoshiportfolio.my.canva.site/

Education

B.S. Mechanical Engineering, Minor: Mechatronics

GPA: 3.60/4.00

The Pennsylvania State University, University Park, PA

Anticipated Graduation Date: 12/2026

Relevant Coursework: Thermodynamics, Circuits and Devices, Machine Design, Fluid Mechanics, GD&T to ASME Y14.5

Professional Experience

Mechanical Integrity Engineering Intern, Amphenol Communication Solutions
Valley Green, PA

May 2025 – Aug 2025

- Increased reporting efficiency for 15+ projects by automating LLCR data analysis using Minitab and Excel.
- Reduced report turnaround time by 30 percent by co-developing a PowerApp integrated with SharePoint for structured customer failure submissions.
- Accelerated test setups for 10+ client projects (incl. Cisco) by designing custom vibration fixtures in SolidWorks for complex PCB layouts.
- Resolved qualification test failures through root cause analysis, ensuring compliance with ISO standards.

Lab Technician, Origin Labs, Happy Valley LaunchBox
University Park, PA

Oct 2024 – Present

- Led product development for a client-sponsored medical device (“PALMS”), redesigning a patent-backed tablet holder to improve ergonomics, integrate battery housing and accessibility features, and incorporate a 180° rotary detent mechanism.
- Reduced prototype lead time by 40 percent by designing 100+ parts in SolidWorks and Fusion 360 using DFM/DFA principles.
- Cut lab downtime by 25 percent by maintaining and calibrating 30+ Industry 4.0 machines.

Undergraduate Research Assistant, S.H.A.P.E. Lab, Penn State
State College, PA

Sep 2024 – Jan 2025

- Achieved less than 2 percent error in FEA deformation analysis by optimizing mesh refinement in Ansys and Abaqus.
- Improved simulation speed by 40 percent through mesh convergence studies that reduced element count.
- Enhanced reliability of LPBF part simulations by 30 percent by correlating deformation behavior with mesh density.

Leadership Experience

Design Team Officer / Project Lead, American Society of Mechanical Engineers (ASME) Club
University Park, PA

Jan 2024 – Present

- Directed a 15-member interdisciplinary team to develop a SolidWorks-designed wearable device, enhancing spatial awareness for visually impaired users and reducing navigation error by 60 percent in user tests.
- Engineered a closed-loop system with Arduino microcontrollers, ultrasonic sensors, and vibration motors, programming control logic in C++ for sub-200 millisecond object detection.

IDEA Ambassador, Penn State Residence Life
University Park, PA

Aug 2025 – Present

- Mentored and supported a residential community of 500+ students across four halls, fostering connections through 6+ hours/month of engagement programs and individualized peer support.
- Partnered with 10+ campus offices and student organizations to design and deliver community-building initiatives, strengthening collaboration, communication, and problem-solving skills.

Projects

Selected academic and personal projects demonstrating design, prototyping, and problem-solving skills

- **Tone Control and Karaoke Audio Mixer Circuit (Personal Project)**
- **Dog Food Dispenser for Low-Dexterity Users and Service Dogs (Course Project: Design Methods)**

Technical Skills

- **CAD and Simulation:** SolidWorks, AutoCAD, Ansys, Abaqus, Fusion 360, NI Multisim, FEA.
- **Engineering Methods:** DFM/DFA, prototyping, root cause analysis, GD&T (ASME Y14.5), ISO standards.
- **Programming:** C++, MATLAB, Visual Basic, Arduino IDE.
- **Tools:** Microsoft Office, Minitab, PowerApps, First Aid/CPR/AED.