

COLE PACE

Flagstaff, AZ | (480) 417-9999 | colepace9@gmail.com

EDUCATION

Northern Arizona University

Bachelor of Science in Mechanical Engineering

Flagstaff, AZ

Expected May 2026

- GPA: 3.50 | Dean's List Fall 2022 - Fall 2025 | Lumberjack Scholarship
- Relevant Coursework: Thermodynamics, Fluid Mechanics, Machine Design, Heat Transfer, CAD/CAM, Engineering Analysis

TECHNICAL SKILLS

Software: SOLIDWORKS (CAD/FEA), MATLAB, ANSYS, Visual Studio Code, Microsoft Office Suite

Manufacturing: 3D Printing, CNC Machining, Rapid Prototyping, GD&T, DFM Principles

Analysis: Engineering Analysis, Heat Transfer, Structural Analysis, Design Validation

PROJECT EXPERIENCE

Wearable Active Gravity-Compensating Robotic Arm

Sept 2025 - Present

Senior Capstone Project | Northern Arizona University | 5-Person Team

- Prototype Manufacturing Lead: Designed and fabricated 4 functional prototypes using SOLIDWORKS, 3D printing, and iterative design validation
- Project Manager: Coordinated 5-person team workflow, delegated tasks, and managed project timeline and deliverables
- Developed active gravity-compensation system to assist stroke survivors with arm weakness in performing daily activities
- Utilized MATLAB for kinematic analysis and control system development; performed structural validation using FEA

Non-Invasive Foot Pedal for Dormitory Sink

Feb 2023

EGR 186 Design Project | Northern Arizona University

- Designed and built functional foot pedal prototype for hands-free sink operation using limited materials and budget constraints
- Delegated tasks and managed documentation for 4-person engineering team; presented final product to Gore Engineer

Formula SAE Racing Club

2023 - 2024

Northern Arizona University

- Machine Shop Safety Certified; shadowing senior members in vehicle design and manufacturing processes

WORK EXPERIENCE

Academic Success Center Tutor

July 2023 - Present

Northern Arizona University | Flagstaff, AZ

- Provide one-on-one tutoring in Calculus, Physics, Chemistry, and Engineering courses; CRLA Professional Tutoring Certified
- Develop communication skills by explaining complex technical concepts to diverse learning styles