

Alexandra Miller

Flagstaff, AZ | Phoenix, AZ

Cell: (602)-930-9667 | Email: alexdilani742@gmail.com | LinkedIn: [linkedin.com/in/alexandra-dilani-miller](https://www.linkedin.com/in/alexandra-dilani-miller)

Education

Northern Arizona University | Flagstaff, AZ

Bachelor of Science - Mechanical Engineering

Distinctions: Dean's List, Lumberjack Scholarship – full tuition awarded

Courses: Material Science, Engineering Analysis, Thermodynamics, Mechanics of Materials, Numerical Analysis, SOLIDWORKS modeling, Machine Design, Fluids Mechanics

Expected Graduation: Fall 2026

GPA: 3.77

Paradise Valley Community College | Phoenix, AZ

AGEC Certificate

Graduation: Spring 2023

GPA: 4.00

Experience

Calculus III Mathematics Tutor | NAU Academic Success Center | Flagstaff, AZ

September 2024 - present

- Supports Calculus III students with their coursework, including homework and quiz/exam corrections
- Works 10 hours a week; gives a 1 to 2 hour lecture every month for exam preparation
- Creates a welcoming and supportive environment for students to learn and increase their problem-solving skills
- Provides resources for students to find additional math help, student services, and peer support
- Students increase scores by 10-20% throughout semester with tutored support

Volunteer Lab Technician | NAU Bioengineering Devices Lab | Flagstaff, AZ

August 2024 – January 2025

- Collaborated and received two grants from Jean Shuler Research, totaling \$1000
- Tested biocompatible polymer materials under direction of Ph.D. candidate to further experimentation on stents
- Assisted in the calibration of the flow model of the circle of Willis. Furthered testing on catheters used in stroke treatment

Customer Service | Barro's Pizza | Cave Creek, AZ

May 2021 – August 2023

- Works 35 to 40 hours
- Connecting to the community through fundraising events for local schools
- Trained 15 new employees in the front of house operational procedures and company standards
- Effectively managing time to complete tasks, along with supporting coworkers with their tasks

Seasonal: August 2023 - present

Technical Projects

EGR186 Sustainable Composts – Project Leader

- Created four mini composts using reusable materials: a 2-liter soda bottle, binder clips, and cheese cloth
- The composts are affordable, 10 dollars each, and compactible, suitable for college students in dorm/apartment living
- This project won the WL. Gore acceptance for course section

ME286 Bridge Building STEM kit – Project Manager

- Created a STEM kit involving bridge pieces that were different lengths and could be built together with different angles
- Targeted for high schoolers to demonstrate principles of statics

ME386 Solar Panel Tracking Project – Project Manager

- Researched and designed solar panel system with dual-axis rotation for tracking photovoltaic waves
- Project prioritizes optimizing solar capture to increase efficiency from panel units

Skills

Technical Skills: Excel | Teams | Word | SOLIDWORKS | MATLAB

Awards/Certificates:

| NAU Honors Program August 2023 – present | WL. Gore acceptance December 2023 | AP Scholar Award July 2022 |