25312 N. 52nd Avenue | Phoenix, Arizona 85083 | <u>mrana8@asu.edu</u> | 480.694.6156

EDUCATION

Studying at Arizona State University - Polytechnic Campus

2017-2018

- · Undergraduate Sophomore majoring in Engineering (Robotics) with a minor in Applied Mathematics
- · Barrett Honors College
- · Current GPA: 4.00

Attended BASIS Peoria

2011-2016

- · Current GPA: 3.83 unweighted, 4.59 weighted
- · Graduated High Honors

EXPERIENCE

Engineering Teaching Assistant

- Became a teaching assistant for EGR 101 freshman year
- Required lecturing the class, being involved in in-class activities, and required out of class office hours and grading

Intern at Kutta Technologies

- Primary software tester at Kutta Technologies
- Exposed me to the engineering mindset and how to manage communication with other engineers who are working on different components of the same project

Nepal Study Abroad Program

- Spent 3 weeks abroad in Nepal throughout various cities
- Focused on three projects: harvesting invasive weeds to create biochar, providing STEM education at an elementary level in third-world countries, and solar-powered irrigation systems
- Improved my abilities to work in harsh conditions with people speaking a completely different language and cultures

Research Paper

- Wrote a research paper titled "Maximization of the Vertical Acceleration of a Quadcopter"
- Modified an off-the-shelf quadcopter in order to make it significantly faster
- Created a MATLAB simulation to simulate the same modifications and understand their effects

Competed at the 2017 VEX World Championships

 Gained experience in competing, learning how to improvise, and work under extreme pressure

Earned the Bechtel Scholarship

Completed Engineering Coursework

EGR 101 - Foundations of Engineering Design Project 1

FSE 150 - Grand Challenges for Engineering

MAT 267 - Calculus for Engineering III

EGR 102 - Foundations of Engineering Design Project 2

EGR 104 - Critical Inquiry in Engineering

FSE 201 – Engineering Undergraduate TA

PHY 121 - University Physics 1: Mechanics

EGR 494 - Engineering Communities in Energy and Education Innovation

EGR 201 - Use-Inspired Design Project 1

EGR 216 – Electrical Engineering Fundamentals

EGR 218 - Materials and Manufacturing Process

EGR 280 – Engineering Statistics

MAT 275 - Modern Differential Equations

Will Complete in the Next Semester

EGR 202 - Use-Inspired Design Project II

EGR 217 – Engineering Mechanicals Fundamentals

EGR 219 – Computational Modeling Engineering Systems

MAT 343 - Applied Linear Algebra

PHY 321 - Vector Mechanics and Vibrations