**Colton Acosta**

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**SUMMARY**

Sophomore BSE in Aerospace Engineering with concentration in Astronautics applying for the NCR iNCRedible scholarship.

**EDUCATION**

**B.S.E., Aerospace Engineering;** Astronautics Graduating May 2022 Arizona State University, Tempe, Arizona 4.00 GPA

**TECHNICAL SKILLS**

**Design and Applications:** MATLAB, SOLIDWORKS, Autodesk Fusion 360, RockSim, OpenRocket

**Programming:** Arduino

**ACADEMIC PROJECTS**

**ProMod Team Member, ProMod Aircraft Design Project, ASU** August 2018-November 2018

* Complemented Introduction to Engineering with Small Group Communications by creating a promotional poster and video
* Collaborated in a team of four to build physical and digital prototypes for a theoretical aircraft
* Designed aircraft interior and wing cross-section with Autodesk Fusion 360 drawings and used them to laser cut physical prototypes
* Designed Aircraft Exterior with Autodesk 360 CAD
* Programmed prototype aircraft automation with Arduino

**Barret Honors Student, MATLAB Moon Simulation, ASU**  January 2019-May 2019

* Programmed a MATLAB simulation of a round trip to the moon using a free return trajectory
* Utilized Apollo 11 data such as the Earth orbital altitude and the translunar injection delta-v
* Implemented multiple numerical methods such as Euler’s method and the Runge Kutta method

**COMMUNITY INVOLVEMENT**

**5280 Team Member, Sun Devil Rocketry, ASU** Fall 2018-Spring 2019

* Collaborated with a group of ten to build a stage one rocket from scratch
* Designed the rocket to reach a maximum altitude of one mile by using the rocket launch software RockSim and OpenRocket
* Built the rocket by wrapping phenolic tubing in fiberglass and laser cutting G10 Fiberglass fins
* Used a microcontroller with internal altimeter for dual parachute deployment and an 1600 R motor for propulsion

**OTHER WORK EXPERIENCE**

**Barro’s Pizza, Scottsdale, Az: Cook** August 2016-August 2018

* Worked alongside several cooks and managers in a fast-paced and demanding work environment