

Gina T. Altimari

galtimari@mail.usf.edu
(352)200-8930

EDUCATION

Bachelor of Science in Mechanical Engineering

December 2019

Specialized Courses: Bioastronautics, Air Conditioning Design, FEA

University of South Florida

Tampa, FL

PROJECT EXPERIENCE

➤ Hyperloop Pod

August 2019-Present

- Constructed preliminary designs for admission documentation of Hyperloop competition.
- Researched permanent magnets for primary levitation system and compatibility with pod design.
- Created schedule for team to work towards proof of concept on propulsion, braking, and levitation.

➤ Candy Dispenser

April 2019-Present

- Designed interior gear mechanism and preliminary shell to properly dispense candy.
- Researching proper techniques for surfacing tools.

➤ Winch Design Project

November 2018-December 2018

- Wrote code for optimization and cost analysis of winch design using MATLAB.
- Designed and assembled parts utilizing SolidWorks and 3-D printing based on optimization software.
- Worked with fellow engineers to meet deadlines and won course competition with the built prototype.

➤ Television Mount

November 2018-December 2018

- Designed swivel mounting mechanism and assembly parts for maximized loading.
- Constructed mesh and loading scenarios for SolidWorks simulation analysis of designed parts.
- Analyzed stress testing simulation results to optimize loading and cost for materials selected.

➤ Mechanical Lift

March 2018-May 2018

- Performed mechanical advantage calculations to ensure optimization of lift mechanism.
- Utilized SolidWorks to set tolerance measurements and prepare prototype for 3-D printing.
- Assembled prototype from 3-D printed components and machined connector pins.
- Worked with team to create analysis report and presentation of final prototype under time constraint.

➤ Air Conditioning System

March 2018-May 2018

- Worked in a team environment to design an AC unit for a single-story elementary school building.
- Analyzed heat loads applied to conditioned spaces to calculate yearly taxpayer cost.
- Designed AC specifications based on research into Florida HVAC codes and standards.

QUALIFICATIONS

- **Software:** SolidWorks (CSWA, CSWP-S certified); MATLAB; LabVIEW; Microsoft Office
- **Other:** 3-D Printing

WORK EXPERIENCE

➤ Educational Testing Service: SAT/ACT Proctor

November 2015-Present

➤ Suncoast Goodwill Inc: Sales Associate

March 2013-December 2015

ACADEMIC AFFILIATIONS

- ASHRAE Florida West Coast Student Member

September 2019-Present