Jacob Mitchener

11 Ironmaster Dr. 240-315-4963 Thurmont MD 21788 jacobpm_97@yahoo.com

Education

B.S. Mechanical Engineering Anticipated May 2019

University of Maryland, College Park, MD

GPA: 3.2

Technical University of Denmark, Lyngby, Denmark

Virtus Living and Learning Community

August 2015 – May 2017

University of Maryland, College Park, MD

Technical Experience

Vane-Type Inertial Separator Modeling, Group Leader

August 2017 – December 2017

University of Maryland, College Park, MD

- Collaborated with four other engineering students to develop a scaling system for a particle-fluid separation apparatus
- Developed a meeting schedule and organized all group meetings
- Oversaw and contributed to all aspects of the project

Beam Project, Team Member

March 2017 – May 2017

University of Maryland, College Park, MD

- Designed a beam and performed calculations to assess the stability of the beam with the goal of achieving a high strength to weight ratio
- Constructed the beam and made choices regarding materials and construction techniques
- Produced a detailed final report

CAD Airplane Design Project, Team Member

October 2016 – December 2016

University of Maryland, College Park, MD

- Worked in a group of four mechanical engineering students to design several modifications to a Boeing 747 aircraft using PTC Creo Parametric
- Helped design space shuttle and its supports to mount it to the back of the aircraft
- Modeled stresses on the supports and the aircraft in PTC Creo Simulate

Work Experience

Mount Saint Mary's University - Lifeguard, Swimming Instructor

May 2016 - Present

- Trained and certified in first aid, CPR, and water rescue
- Able to work individually and on a team to create a safe environment for patrons
- Required fast decision-making and assurance in those decisions
- Taught water safety and worked on confidence in the water and perfecting swimming strokes

Skills

PTC Creo Parametric, Autodesk Inventor, Solidworks, Siemens NX, Python, Java, Microsoft Word, Microsoft PowerPoint, Microsoft Excel, Microsoft Publisher, Matlab

Personal Projects

Alien Invasion Python Game

August 2017 - December 2017

- Developing a game using Python and the Pygame library
- Using various functions from the Pygame library, users can control the ship and shoot and destroy enemies

Nontechnical Activities

- Content Creator for The Odyssey Online
- Amateur Filmmaking (Adobe Premiere Pro)
- Intramural Soccer captain
- Music (guitar, piano, ukulele)