Anthony Del Coro

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EDUCATION

Virginia Tech May 2027
Bachelor of Science in Mechanical Engineering GPA: 3.3/4.0

EXPERIENCE

Altec | *Product Engineering Co-op* **Roanoke, VA** | Summer / Fall 2024

- Supported development and testing of a new line of digger derricks.
- Daily**,** I designed large assembly models, optimized parts for manufacturing and assembly, applied ANSYS for design evaluation, and drafted prints for installation.
- Conducted study on bolt pre-load vs. torque for pedestal installation. Prompting a re-evaluation of the companies torquing standards for this application, and new standard practices being implemented.
- Re-vamped the plants hydraulic pump pack, with a focus on serviceability, modularity and ease of use. Implemented in production with a 30% reduction in set-up time on the plant floor.
- Developed and manufactured a work platform for prototype derrick. Key features included development of a modular system for placing counterweight (upwards of 10 tons) removing the need for welding.

Astrobotics at Virginia Tech | *Manufacturing Lead* **Blacksburg, VA** | 2022-Present

- Contributed to the design and construction of a semi-autonomous robot for building berms in a simulated lunar environment, showcasing skills in systems engineering, project management, and mechanical design.
- Led a sub-team in developing a robot chassis, achieving weight optimization and efficient design for manufacturing and assembly (DFM/DFA).
- Successfully created a chassis under mass budget, reducing assembly/manufacturing time by 2 months.
- Transitioned to Manufacturing Lead, training and consulting team members in DFM as well as physical manufacturing techniques. I additionally led training on SolidWorks and FEA.

Lake Mohawk Country Club | *Supervisor* **Sparta, NJ** | 2019-2023

- Led emergency response efforts, conducted safety drills, and managed patron interactions. Improved emergency response time, enhancing overall safety and preparedness.
- Demonstrated high vigilance, strong leadership, and exceptional interpersonal skills.

PROJECTS AND LEADERSHIP

3D Input Device Spring 2024

- Collaborated with a small group to develop a 3D input device for CAD software. The device allowed the user to translate the model by interpreting the 3D input from the device.
- Encompassed the entire design process, exploring economics, design, prototyping, and marketing.
- Produced for 80% less than current market offerings.

Vex Robotics 2019-2022

- As the leader of a design team, I led the development of a competitive robot for the VEX competition season. This project required extensive use of CAD, problem solving and physical prototyping.
- Our team's efforts culminated in competing at the World Championship in Dallas, Texas.

Senior Patrol Leader 2019-2020

- Organized and led weekly meetings for scout troop, developing curriculum and activities.
- Underscored my leadership skills and commitment to fostering a dynamic and enriching environment.

SKILLS

Relevant Coursework: Kinematics, Thermodynamics, Applied Electrical Theory, Vibrations, Fluid Dynamics
Software: SolidWorks (Certified Professional), NX, ANSYS (Structural), MATLAB, Microsoft Office
Manufacturing: Vertical Mill, Lathe, Waterjet, 3-Axis CNC, 3D Printing and Welding (TIG, MIG, and Stick)

AWARDS

- Eagle Scout - Troop 150 2020
- College of Engineering Dean's List - Virginia Tech 2022-2024
- Awarded William A. and Betty W. Potts Scholarship - Virginia Tech 2023-2024