Anthony Del Coro

School Address: Blacksburg, VA 24060 anthonydelcoro@vt.edu | (973) 529-4915 linkedin.com/in/anthonydelcoro

Home Address: Sparta, NJ 07871

Education VIRGINIA TECH

Bachelor of Science in Mechanical Engineering, GPA: 3.3/4.0

BLACKSBURG, VA May 2027

Relevant Coursework: Kinematics of Machinery, Thermodynamics, Applied Electrical Theory, Vibrations, Fluid Dynamics, Mechanical Design

Skills

Software: SolidWorks (Certified Professional), NX, ANSYS (Structural), MATLAB, LATEX, Microsoft Office Manufacturing: Vertical Mill, Lathe, Waterjet, Plasma Table, Press-Break, 3-Axis CNC, 3D Printing and Welding (Oxy-Fuel, TIG, MIG, Stick)

Experience

ALTEC

ROANOKE, VA Summer / Fall 2024

Product Engineering Co-op

- Supported development and testing of new digger derricks.
- On a daily basis, 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 standard for this application, leading to 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.

ASTROBTOICS AT VIRGINIA TECH

BLACKSBURG, VA

Manufacturing Lead

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 and manufacturing time by 40%.
- Transitioned to Manufacturing Lead, training and consulted team members in DFM as well as physical manufacturing techniques. I additionally led trainings including SolidWorks and FEA.

LAKE MOHAWK COUNTRY CLUB

SPARTA, NJ

Lifeguard / Supervisor

2019-2023

- Oversaw operations of 10 beaches, ensuring safety and efficiency.
- Led emergency response efforts, conducted safety drills, and managed patron interactions. Improved emergency response time by 15%, enhancing overall safety and preparedness.
- Demonstrated high vigilance, strong leadership, and exceptional interpersonal skills.

Projects

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.

Leadership

SENIOR PATROL LEADER

2019-2020

- Organized and led weekly meetings for many scouts. Collaborating closely with adult leaders, developing curriculum and activities.
- Underscored my leadership skills and commitment to fostering a dynamic and enriching environment.

Awards & **Honors**

Eagle Scout - Troop 150

College of Engineering Dean's List - Virginia Tech

Awarded William A. and Betty W. Potts Scholarship - Virginia Tech

National Honor Society - Sparta High School

2022-2024 2023-2024

2021

2020