# Ciaran Nimick

Torrance, CA | ciarannimick@gmail.com | (310) 421 6908 | ciarannimick.com | linkedin.com/in/ciaran-nimick

## Professional Summary:

A highly motivated and results-driven engineering student pursuing a Bachelor of Science in Mechanical Engineering looking to leverage 6 years of engineering software experience and teaching others into a boundary pushing experience during the summer of 2026.

## Education:

**Case Western Reserve University (CWRU)** - Cleveland, OH ***Expected* Spring 2028**

- Bachelor of Science in Engineering - Mechanical Engineering
- Relevant Coursework: Thermodynamics, Statics and Strength of Materials, & Mechanical Manufacturing

## Experience:

**Suspension Engineer at CWRU Motorsports** **June 2025 - Present**

- Designing the 2026 Baja SAE front lower suspension arm & tie rods, improving ride height, reducing weight, and serviceability.
- Utilizing Finite Element Analysis, validating multiple components within the front outboard assembly to withstand maximum moments and forces within a factor of safety to ensure components achieve design requirements.
- Aided in developing vehicle setups for different racing environments through adjustments to suspension and steering.

**Test Engineer at CWRU Motorsports** **September 2024 - Present**

- Analyzed and designed an adapter to transmit ~500 ft lbs of torque to aid in CVT development.
- Designed a shroud for the CVT Dyno in Siemens NX to dissipate 20kW of heat and ensure safe operation during testing.
- Fabricated components by utilizing milling, turning, and metal bending to meet precise design specifications.

**Teaching Assistant (EMAE 160 - Mechanical Manufacturing) at CWRU** **August 2025 - Present**

- Instructed students in manufacturing best practices, complete part definition, and design for the end-user.
- Taught 16 students an introduction to Solidworks part design, assemblies, and drawing best practices in preparation to take the certified Solidworks associate exam (CSWA).
- Graded ~180 manual sketching assignments, ensuring part dimensions were fully defined and projections were correctly drawn.

**Research Assistant at Case Western Reserve University (WAKANDA Lab)** **March 2025 - August 2025**

- Partnered with graduate researchers to explore magnetoreception in animals, aiming to translate biological navigation strategies into tools for interplanetary exploration.
- Aided in developing a predictive model for satellite movement in extraterrestrial magnetic fields, incorporating generalizable planetary and orbital parameters.

**President, Project Manager, & Lead Design at PVPHS VEX Robotics** **August 2020- June 2024**

- Designed twelve competition robots utilizing Onshape and Fusion 360 to design and implement team solutions.
- Won five local and state awards, leading to three State Championship and two National Championship qualifications.
- Oversaw a fourfold increase in annual funding, tripled team membership, and doubled the number of competition teams.
- Organized an inaugural robotics event, raising $8,000 and earning congressional recognition from Congressman Ted Lieu.

## Skills:

**Design:** Siemens NX | SolidWorks | Onshape | Fusion 360 | Ansys
**Manufacturing:** GD&T | Mill | Lathe | Waterjet | CNC Router | Laser Cutter | Drill Press | Band Saw | Tube Bender
**Software Languages:** MatLab | C++ | Java

## Awards & Achievements:

SMERT Department Award Winner **May 2024**
PVPHS VEX Engineering Excellence Award **March 2024**