

Naman Athavale

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EDUCATION

University of California Riverside— B.S Mechanical Engineering [In Progress] U.W. GPA: 3.93

- Coursework: Engineering Graphics & Design, Differential Equations, Computational Modeling
- Recipient of the 2026 \$1,500 BCOE Engineering Scholarship
- Pitched a \$20k proposal for a dedicated manufacturing space for ME senior design teams to 100+ attendees at UCR's 2026 Re:Write, Re:Build Symposium

EXPERIENCE/LEADERSHIP

Robotics and Medical Systems Lab (at UCR)— Undergraduate Researcher [December 2025- PRESENT]

- Developing an underwater robot actuated by snap-through of nested precurved superelastic nitinol tubes, adapting a concentric tube manipulator mechanism from minimally invasive surgical robotics
- Secured a \$1k research mini grant to fund equipment and development for underwater robot research project

Highlander Combat Robotics— Executive Board Member [October 2025- PRESENT]

- Led three vertical spinner combat robot designs that competed at UC Irvine and USC, modeling the weapon assembly and chassis in Fusion
- Wired and integrated brushless motors, ESCs, LiPo batteries, and RC Receivers into the drivetrain and weapon systems
- Analyzed post-match failures and redesigned drum weapon assembly between competition events

FSAE Highlander Racing— Associate Engineer [October 2025- PRESENT]

- Modeled SolidWorks assemblies of a V6 engine and FSAE chassis with tolerancing and manufacturing drawings
- Generated 5+ GD&T manufacturing drawings for the chassis subteam cost report
- Researching frame design validation, physical torsion testing methodologies, and composite floor R&D for upcoming vehicle integration

Highlander Space Program (at UCR)— L1 Member [June 2026- PRESENT]

- Simulating aerodynamic stability and flight profile in OpenRocket for a Mach-1-capable high-power rocket to secure National Association of Rocketry (NAR) Level 1 certification
- Mitigating transonic fin flutter through fiberglass lamination

Highlander Space Program (at UCR)— Manufacturing Team [September 2025- April 2026]

- Developed Computer-Aided Manufacturing (CAM) toolpaths to produce hardware for the structures and propulsion subteams
- Completed technical training in the mechanical engineering machine shop, gaining practical experience operating CNC mills and lathes for precision part fabrication

FRC Robotics (Lynbrook Robotics)— Officer [September 2021- May 2025]

- Co-led the design and fabrication of a competition-winning robot using Autodesk Inventor, integrating 15+ custom FDM 3D-printed pulleys—for a belt-driven continuous elevator—to optimize weight and secure 4 finals appearances across 8 events
- Oversaw the creation of 10+ field elements, which simulated realistic test environments for regional competitions
- Trained 40+ members on tool operations and shop protocols during the 2023 fall, resulting in a zero-incident record during the 2024 build season

SKILLS

Computer Aided Design— Autodesk Inventor, Fusion, SolidWorks, Onshape, FEA, Bambu Studio, GD&T

Computer Software— Java, Python, MATLAB, LTSpice, OpenRocket, Arduino, Microsoft Office

Fabrication— CNC Mills/Lathes, CAM, 3D FDM Printing, Fiberglass composites layup, Soldering