

Oliver D. Pilon

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EDUCATION: California Polytechnic State University, San Luis Obispo, CA

- M.S. Biomedical Engineering, Expected December 2025
- B.S. Biomedical Engineering: Mechanical Concentration, June 2024

SKILLS

- **Engineering Design Tools:** COMSOL, CAD softwares (Solidworks, OnShape, Fusion360)
- **Analysis & Problem Solving:** Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), FMEA, GD&T,
- **Manufacturing:** CNC Machining, 3D printing, welding, milling
- **Programming:** MATLAB, Python, ReactJS

PROJECTS

Wildland Fire Respirator

Sep 2023 - Current

- Assumed sole responsibility of the project for Masters thesis.
- Collaborated with a multidisciplinary team to meet stringent industry safety standards.
- Designed and fabricated custom components for all stages of development, testing, and final prototype.
- Developed a testing rig to safely handle hazardous gasses, measuring filtration and fan efficiency.

ENVE Stem Aerobar Mount Modification

Sep 2024 - Dec 2024

- Leveraged FEA to verify deflection and strain remained under safety thresholds for my design.

Pulse Oximeter Design

Jan 2022 - Mar 2022

- Redesigned portable pulse oximeters to provide more mobility while also increasing accuracy on different skin colors

EXPERIENCE

Race Director, *Mustang Showdown*, San Luis Obispo, CA

Apr 2024 - Dec 2024

- Organized and hosted the first of its kind, wave-based progressively competitive super sprint triathlon, fostering engagement and innovation.

Sales Associate, *Fluid Nutrition*, San Luis Obispo, CA

Jul 2022 - Present

- Operated in a fast-paced environment, efficiently preparing products for shipment.

Race Director, *March Triathlon Series*, San Luis Obispo, CA

Mar 2022 - Mar 2023

- Generated \$20,000 profit out of \$30,000 revenue through effective budgeting, sponsorship acquisition, and increased participation
- Coordinated with local jurisdictions, clarifying roles and obtaining appropriate permits
- Ensured the timely and thorough completion of all race-related tasks by managing a team of 60+ volunteers, adapting to group members' strengths, and addressing resource gaps

INTERESTS • Cycling • Brewing • Skiing • Golfing

REFERENCES • Available upon request