

# Kyle Blanset

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## Education

University of California, Berkeley, B.S. Mechanical Engineering  
Laney College, Engineering  
SOLIDWORKS Professional Certificate in Mechanical Design  
Lean Six Sigma Black Belt in Engineering

Completed  
May 2025, GPA 3.66  
May 2023, GPA 4.00  
November 2021  
July 2021

## Skills

- Manufacturing – 3D printing, CNC, Welding, composites, molds, GD&T, drawings, testing,
- Computer – Solidworks, Creo, Fusion 360, Ansys, Matlab, C++, VS Code, Excel, firmware, micro-controller.
- Interpersonal – Team lead, conflict resolution, presentations, instructing, adaptability.

## Projects

- **Continuous Composites 3D Printer** – Developed a novel method of fiber layup into 3D printed parts by editing a printers firmware, redesigning XY gantry in SolidWorks, and coding a matlab script to modify Gcode. Sample parts were designed per ASTM D638 and tensile tested. Invited to present at ICAM 24.
- **Six DOF Stewart Platform** – Computer vision controlled platform to balance an object. Programmed a microcontroller in C++ to utilize realtime programming and custom PWM control, GUI in LabVIEW.
- **Carbon Fiber Road Bike** – Designed compression molds and mandrels with Autodesk Fusion 360. Improved tube manufacturing by using water-soluble 3D printed mandrels and programming a CNC tube winder.
- **Underwater Remote Operated Vehicle** – Designed propulsion system, created CAD model with PTC OnShape, and made bill of materials for mechanical and electrical components.

## Professional Experience

Mechanical Engineer Student Assistant, Lawrence Berkeley National Lab June 2023 – Present  
Performed design and analysis work on multiple projects for the LHC particle accelerator at CERN.

- Designed parts using **Creo Parametric** CAD with Windchill as the product life cycle manager, assemblies were simulated in the **FEA program ANSYS** for stress, bending, and modal characteristics.
- Designed tooling for the largest carbon fiber instrument shells produced at LBNL to date.
- Collaborated with international teams to design chip vacuum testing holders with planar spring.
- **Wrote detailed procedure** and designed fixtures to align flanges parallel to within 250µm from 3m apart.

Research Intern, UC Berkeley June 2022 – August 2022  
Characterized an emerging semiconductor material, lanthanum cobaltite.

- Autonomously operated a LakeShore Cryogenic probe station and Keysight B1500A semiconductor analyzer then processed and visualized data using Matlab.
- Presented at a UC Berkeley **poster session**, a seminar, and the SACNAS Diversity in STEM Conference.

Propulsion Systems Mechanic (MMN), United States Navy June 2015 – June 2021  
Submarine mechanical technician and team leader for nuclear reactor refueling and sea-going operations.

- Served as the Assistant Quality Assurance Officer, was the **technical expert** and second in charge of administering the submarine's quality assurance program. USS Wyoming received an **"Excellent" grade** during a quality assurance audit from the Submarine Squadron 16.
- Combined applicable information from dozens of manuals and hundreds of technical drawings to generate standalone maintenance and testing procedures as **Machinery Divisions Planner**. Received two Navy and Marine Corps Achievement medals for work in this role.
- **Directly supervised up to 5 mechanics** as Engine Room Supervisor to coordinate daily operations, dynamic evolutions, and equipment malfunctions with a perfect safety record.

## Additional Experience

- Officer, Pi Tau Sigma–Redesigning PTS website, organizing initiate events. August 2024–Present
- Sailing Instructor, Cal Sailing Club–Gives lessons to intermediate sailors. June 2024–Present
- President, Laney Engineering Club–Organized events, increased membership. May 2022–May 2023