

Daniel Akhondi

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HIGHLIGHTED QUALIFICATIONS

Mechanical Engineering graduate from UC San Diego with hands-on experience in mechanical design, prototyping, assembly, and testing of complex systems. Proficient in 3D CAD, simulation tools, and programming for engineering applications. Skilled in problem-solving, cross-functional collaboration, root cause analysis, and delivering innovative solutions in fast-paced, technical environments. Eager to contribute technical expertise and a strong work ethic to engineering-driven teams.

EDUCATION

University of California San Diego - B.S. Mechanical Engineering

- **Graduated June 2025 - GPA: 3.68**
- **Relevant Coursework** - Engineering Design, Machine Design, Solid Mechanics, Fluid Mechanics, Heat Transfer, Materials Science, Computational Methods, Linear Controls

SKILLS

- **CAD & Simulation** - SolidWorks, Fusion 360, AutoCAD, ANSYS (FEA)
- **Programming** - Python, MATLAB, C++, Arduino, Raspberry Pi
- **Prototyping & Manufacturing** - 3D Printing, Laser Cutting, CNC Machining, Soldering
- **Engineering Tools** - GD&T, DFM, CAM (Fusion 360), Microsoft Excel (data & fatigue analysis)

EXPERIENCE

Sensible Technologies LLC - Mechanical Engineer Intern

April 2025 - May 2025 | UC San Diego

- Redesigned SolidWorks assemblies to increase device capacity by 128% (14 to 32 cartridges) while maintaining dimensional and tolerance specifications
- Analyzed and refined CAD models to meet strict mechanical constraints, accelerating design iterations and reducing ambiguities
- Led design review meetings with the technical lead, driving alignment on engineering constraints and streamlining development cycles
- Validated prototype builds through detailed hands-on assembly checks, ensuring functional compliance with design requirements

UC San Diego Health - Hardware Design & Documentation Coordinator, Nerve to Smile

February 2025 – June 2025 | UC San Diego

- Co-led final hardware iteration using Fusion 360, laser-cut acrylic, and 3D-printed PLA to design, prototype, and assemble a modular nerve brace and tension test bed; corrected critical 1 mm fixture misalignments for precise measurements
- Assembled mechanical hardware and integrated electronics (Arduino, motor shield, force/displacement sensors) to enable stress-strain data collection
- Validated sensor alignment and data reliability through test runs for nerve tension characterization
- Maintained comprehensive technical documentation under Good Documentation Practices (GDP) to support regulatory readiness and knowledge transfer
- Presented regular progress updates, incorporating surgeon feedback into design improvements

Formula SAE Triton Racing - Driveshaft Lead, TR-24

June 2023 - June 2025 | UC San Diego

- Led driveshaft redesign for Triton Racing's first electric vehicle since 2009
- Researched steel alloys optimizing strength and cost-efficiency
- Performed fatigue life analysis in Excel using real competition data to predict durability
- Validated stress improvements with SolidWorks Simulation FEA
- Coordinated design reviews to validate calculations, failure analysis, and drivetrain integration
- Produced DFM-optimized SolidWorks drawings for external machine-shop production, then conducted final in-house machining of driveshaft axles