

Nicholas Glenn

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EDUCATION

California Polytechnic State University, San Luis Obispo

Bachelor of Science: Mechanical Engineering, May 2027

Mechanical Engineering student who thrives on complex problem solving and brings a collaborative approach to engineering work. I focus on explaining my technical thinking clearly, walking through assumptions, tradeoffs, and reasoning, because good solutions come from people understanding the problem, not just the final answer.

AREAS OF EXPERTISE

✓ SolidWorks, Fusion 360, AutoCAD, GD&T	✓ FEA, Stress & Structural Analysis	✓ 3D Printing, Materials Selection, Mill/Lathe	✓ Python, MATLAB
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EXPERIENCE

Northrop Grumman Collaboration Project | Mechanical Engineer | Cal Poly SLO, CA (May 2025 – Present)

- Designed bay-door actuation and rack-and-pinion payload lowering mechanisms for Medevac UAV including patient unloading, integrating gears, pulleys, servos, and structural components.
- Engineered mechanisms to meet a strict < 6 lbs total mechanical mass budget, supporting a 30-minute flight time constraint defined by the aerodynamics team.
- Validated payload deployment and landing gear structures using FEA and hand calculations; 3D printed, manufactured and inspected components for drawing compliance.
- Manufactured Kevlar composite structural components to support and protect internal electrical systems within the fuselage.

Mechanical Engineering Department | Assistant and Grader | Cal Poly SLO, CA (January 2026 – Present)

- Assisted students with hand drafting, GD&T, and CAD, reinforcing engineering drawing standards and design fundamentals.
- Provided technical feedback on student work to reinforce drawing conventions and design best practices.

Legacy Mechanical | Project Engineering Intern | San Ramon, CA (June 2025 – September 2025)

- Evaluated design constraints and installation methods to identify cost saving opportunities while maintaining compliance with engineering standards and project requirement.
- Developed and validated 100+ technical cost estimates, performing quantity takeoffs, change orders, and material cost evaluations.

DxD Biotech | Engineering Intern | Mountain View, CA (June 2024 – August 2024)

- Analyzed elderly hip fracture case studies to define design requirements addressing failure modes in existing protection devices
- Designed and evaluated a hip injury mitigation device using CAD and trade studies; presented patent-oriented concepts to industry reviewers.

EXTRA CURRICULARS

Interfraternity Council | Vice President | Cal Poly SLO, CA (December 2024 – January 2026)

- Served as an executive board member coordinating events for 18,000+ students and liaising with San Luis Obispo City Officials.
- Led student fundraisers, philanthropy initiatives, and health seminars focused on SAFER event practices.

Cal Poly Men's Swim and Dive | Division I Athlete | Cal Poly SLO, CA (September 2022 – March 2024)

- NCAA Division I student athlete who balanced a demanding engineering curriculum with year-round training and competition, earning an Athletic Academic Scholarship for academic performance.
- Earned All-American recognition, demonstrating sustained excellence, mental toughness, and commitment in a high-pressure environment.