

JUSTIN MCDONOUGH

M E C H A N I C A L E N G I N E E R

🏠 Los Angeles, CA | Highland, CA

✉ justinsmcdonough@gmail.com

📞 (909)-226-5804

🌐 www.linkedin.com/in/justinmcdonough

OBJECTIVE

Driven mechanical engineering student with hands-on experience in additive manufacturing, 3D modeling, and simulation. Eager to apply my problem-solving abilities through a design and manufacturing internship.

EDUCATION

Bachelor of Science in Mechanical Engineering
California State University Los Angeles | Los Angeles

Sep 2021 – May 2026

Minor in Mathematics | Honors College Student | ASME Member | GPA: 3.78

RELEVANT COURSEWORK: Fluid Mechanics, Thermodynamics

EXPERIENCE

Undergraduate Researcher

Advanced Materials and Manufacturing Laboratory | Los Angeles, CA

Jun 2024 - Present

- Optimizing a lunar wheel utilizing SOLIDWORKS simulations to create general design parameters.
- Validating SOLIDWORKS finite element simulations with experimental testing.

Server

Nicks Restaurant | Pasadena, CA

Jan 2022 - Present

- Balanced work and academics while excelling in a fast-paced environment.
- Developed essential multitasking abilities, conflict resolution, and task prioritization skills.

Optimization & Simulation Engineer Intern

Audi | Győr, Hungary

Aug 2024 - Aug 2024

- Led a multicultural team of four tasked with optimizing the Audi SQ6-etrone drivetrain while meeting minimum requirements.
- Utilized MATLAB and Simulink to simulate and optimize with a result of over 3000+ simulations, completing the project goals.

PROJECTS

Onewheel Drift Trike

Jun 2023 - Present

- Designed using SOLIDWORKS and constructed using 3D printed parts and metal fabrication.
- Applied skills with MIG welding, cutting, material selection, and budgeting.

SKILLS

Software:

SOLIDWORKS, Autodesk, AutoCAD, MATLAB

Technical Skills:

3D Printing, MIG Welding, Lathe, Mill

Additional:

Microsoft Office

Certifications

Certified SolidWorks Associate (CSWA)

Dassault Systèmes

Issued: Oct 2024

- Demonstrates proficiency in 3D modeling, part assembly, and design analysis using SolidWorks.

MATLAB Onramp

MathWorks

Issued: Jul 2024

- Introductory training for MATLAB, including basic programming, data analysis, and visualization.