

JACKSON ZILLES

jmzilles@berkeley.edu | 805.256.5220 | www.linkedin.com/in/jackson-zilles

Education

College of Engineering - University of California, Berkeley

Sophomore (May 2025)

B.S. Mechanical Engineering

❖ Relevant Coursework

3-D Modeling | FEA | Engineering Programming | Differential Equations | Multivariable Calculus | Physics I & II
Solid Mechanics | Linear Algebra | Manufacturing | Design Communication

Skills and Awards

- ❖ **Manufacturing Skills:** Machining / Engineering Drawings / 3-D Printing / CNC Routing / Laser Cutting
 - ❖ **Software Skills:** SolidWorks / Fusion 360 / AutoCAD / Adobe Creative Suite / Microsoft Office Suite
 - ❖ **Soft Skills:** Spanish (conversational) / Leadership / Communication / Teamwork
 - ❖ **Awards:** Berkeley SCET Entrepreneurship Fellow / National Merit Commended Student
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Experience

BEAR Adventure Vehicles— Product Design

Jul 2022 - Sept 2022

- ❖ Utilized 3-D modeling software to create photo-realistic product mock-ups
- ❖ Created modular interior design pieces for product standardization
- ❖ 3-D printed product models for client visualization
- ❖ Collaborated with team members to improve design choices for cost and space limitations

Arch Day Design— Engineering Intern

Jul 2020 - Jul 2021

- ❖ Worked with various software and hardware to successfully 3-D print high quality parts
- ❖ Streamlined designs for optimal printing
- ❖ Created low cost, durable parts for testing
- ❖ Improved design, manufacturing, and testing skills

California State Parks— Ocean Lifeguard

Jun 2021 - Current

- ❖ Responded to emergencies on beach and in water and administered necessary first aid
 - ❖ Patrolled beach to observe beach-goers and identify unauthorized activities
 - ❖ Educated swimmers on safety requirements and enforced strict rules to protect beachgoers
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Engineering Projects

Bioprinting @ Berkeley— Club Engineering Leader

Sept 2021 - Current

- ❖ Designed and manufactured a prosthetic hand from the ground up using CAD and 3-D printing
- ❖ Creating a skin-like layer to combine the functionality of a bionic hand with visual aesthetics

Adjustable Stool Backrest— Design and Manufacturing Lead

Sept 2021 - Dec 2021

- ❖ Designed a spring-loaded backrest with three adjustment points capable of holding full reclining weight
- ❖ Machined 14 individual parts using mill, lathe, water jet, 3D printer, band saw, and metal bending

Model Wind Turbine— Manufacturing Lead

Sept 2022 - Dec 2022

- ❖ Modeled and built a scale wind turbine including blades, a support tower, and a generator housing
- ❖ Tested for angle of attack and tower strength for optimal energy output and strength to weight ratio