Yunzhi Lin

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EDUCATION

University of California, Berkeley

GPA: 3.37/4.00

B.S. Bioengineering Expected Graduation: May 2027

Relevant Coursework: Properties of Materials, Biomechanics, Biochemistry, Tissue Engineering, Polymeric Materials,

Electronics for IoT (Current), Mechanical Behavior of Materials (Current), Structure and Interpretation of Computer Programs

SKILLS

Software: SolidWorks, OnShape, 3DExperience, CREO, Fusion 360, FEA, FEBio, COMSOL, Python, Java, SQL, JavaScript, C++, Scheme, ImageJ, Microsoft Office

Techniques: 3D Printing, Bioprinting, GD&T, Lean Manufacturing, Machine Maintenance and Improvement, Good Manufacturing Practice, Good Documentation Practice

Certification: Competency in Robotics I/II - Career Skills Certificate (YouScience)

Awards: Bakar Ignite Scholar; 2nd Place (California) in Mobile Robotics Technology of the 2023 SkillsUSA Championship

RELEVANT EXPERIENCE

Silver Lake Research Corporation

Irwindale, CA

Engineering Associate

09/2024 - Present Authored and updated comprehensive SOPs for operation, maintenance, and calibration of 5 manufacturing machines, standardizing

- procedures to align with GMP and improve training, reliability, and audit readiness.
- Developed a scheduling system to centralize task assignments across Manufacturing, Production, and QC, improving real-time task visibility, reducing scheduling conflicts, and accelerating project handoffs.
- Performed root-cause analyses on recurring defects and recommended equipment and process modifications, reducing waste, improving production yield, and cutting operating costs through target process improvements.
- Designed custom machine fixtures in OnShape, prototyped them with 3D printing, and applied GD&T to improve machine usability and production repeatability.

Engineering Intern 05/2024 - 08/2024

- Authored and executed 7 validation protocols for new manufacturing machines and software tools, completing 7 verification and validation reports to confirm system performance under varying constraints and enhanced QC efficiency.
- Developed a cost analysis and production capacity evaluation tool in Excel for 4 products, integrating Macros and VBA Scripts to allow testing of different constraints and processes, resulting in more cost-efficient production workflows.
- Designed a 3D production layout for assemblies using Creo, optimizing space utilization, material flow, and environmental control, leading to increased operational efficiency.
- · Performed maintenance and troubleshooting on key manufacturing machines, enhancing reliability and reducing downtime, while honing technical skills in equipment management.

UC Berkeley Mechanical Engineering

Berkeley, CA

Undergraduate Research Assistant — advised by Professor Grace Gu

02/2025 - Present

- Fabricated collagen-based, 3D-bioprinted composite scaffolds to emulate ligament/tendon mechanics and evaluated performance under mechanical testing.
- Tuned printing and post-processing parameters to improve strength, shape stability, and durability of scaffold prototypes.
- Developing a FEBio simulation of collagen-alginate composites across multiple blend ratios to evaluate material properties and reduce costly experimental iterations.

UC Berkeley Nanotechnology Lab

Berkeley, CA

Undergraduate Research Assistant — advised by Dr. Waqas Khalid

01/2024 - 12/2024

- · Designed a master mold for fabricating PDMS-based microfluidic devices using SolidWorks and 3D printing, reducing cost and enabling faster experimental iterations.
- Used COMSOL to simulate forces on carbon nanotube structures during wash steps.

Grip Assistive Device — **EnableTech at Berkeley**

Berkeley, CA

President, Team Lead, Student Mechanical Engineer

09/2023 - Present

- Utilized SolidWorks to design a specialized gripping device that required minimal force to open while securely maintaining grip at rest, thereby reducing the ongoing effort required by the user.
- Employed 3D printing to test and iterate prototypes, ensuring practical and effective implementation of the enhanced design.
- Oversaw all operations for EnableTech, managing 50+ members and presiding over the Executive Board to ensure project success, member retention, and effective communication.
- · Scheduled and facilitated weekly leadership and general meetings; streamlined communication by sending weekly updates, processing organizational emails, and aggregating member feedback to improve satisfaction and engagement.