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, 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 Assistant *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.

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*

- 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*

- Refined microfluidic device fabrication techniques and optimized molds for PDMS casting using SolidWorks and microfabrication to enhance efficiency.
- 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.

Leadership

Society of Women Engineers at Berkeley *Berkeley, CA*

SWE Science Outreach Committee Member *09/2023 – Present*

- Organized and facilitated free monthly STEM events for Grades 4-8, engaging 100+ students with creative, hands-on activities and experiments to foster a passion for science and engineering.