

LUCAS TIAN

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Master of Engineering degree holder with technical skills seeking further experience in product design engineering. Proficient in using SolidWorks, Fusion 360, and Autodesk Inventor. Familiar with designing and fabricating mechanical systems.

EDUCATION

University of California, Irvine

Master of Engineering in *Biomedical Engineering*

GPA: 3.75

- Relevant Coursework: Introduction to Orthopedic Technology, Fabrication of Biomedical Wearables

Irvine, CA

September 2024 – June 2025

University of California, Riverside

Bachelor of Science in *Mechanical Engineering*

GPA: 3.0

- Relevant Coursework: Robotics, Mechanics of Materials, Material Science

Riverside, CA

September 2020 – June 2024

PROFESSIONAL EXPERIENCE

Lux Vitae

Biological Sciences Lab Technician

- Reduced equipment downtime by leveraging CAD and additive manufacturing to design and fabricate custom replacement parts for laboratory instrumentation
- Executed benchwork and laboratory experiments, ensuring high-quality data collection and technical support for the team

San Diego, CA

June 2025 – Present

Impinj

Mechanical Engineering Intern

- Utilized Autodesk Fusion 360 to design shelves for an array of RFID readers, improving organizational efficiency
- Developed a Python-based GUI for real-time motor control of an RFID testing platform, enhancing user interface

San Diego, CA

June 2023 – September 2023

Robotics and Medical Systems Lab, University of California, Riverside

Undergraduate Researcher

- Engineered a custom wiring harness and electrical subsystem to enable remote-controlled operation of a 4-wheeled robot equipped with a tendon-driven arm
- Researched and prototyped a variable-stiffness backbone for next-generation surgical robotics

Riverside, CA

June 2021 – June 2024

Ambrx

Biological Sciences Lab Intern

- Performed Computational Fluid Dynamics (CFD) simulations in Ansys to optimize bioreactor flow characteristics, improving stability for cell growth
- Facilitated genetic engineering workflows through DNA plasmid design, E.coli transformation, and the purification of proteins from both bacterial and mammalian cells

San Diego, CA

June 2020 – August 2020

ACADEMIC PROJECTS

UCI Capstone Project

Capstone Project

- Pivoted the project from using laser doppler vibrometry to utilizing computer vision, decreasing costs tenfold and reducing theoretical implementation time by approximately a month

Irvine, CA

January 2025 – June 2025

UCR Senior Design

Senior Design Project

- Designed the body and electronics of an autonomous tour guide robot built to resemble the UCR mascot "Scotty"
- Produced two modular heads to be swappable while considering the aesthetic importance of the tour robot, and designed the body to be durable, simplistic, and serviceable.

Riverside, CA

August 2023 – January 2024

Highlander Combat Robotics

Vice President

- Co-founded a student-run battlebots club
- Secured funding, acquired a workroom, organized an end-of-year competition, created branding elements, taught engineering design, and garnered newspaper presence

Riverside, CA

August 2022 – June 2024

TECHNICAL SKILLS

- **Modeling & Design:** SolidWorks, Autodesk Fusion 360, Mechanical Design, Prototyping
- **Fabrication & Manufacturing:** CNC Machining, Mechanical Fabrication, 3D Printing, Manual Milling
- **Systems & Electronics:** Systems Integration, Electrical Systems Design, Robotics, Control Systems
- **Computation:** Python, Technical Scripting