Kaden Lee

EDUCATION

• University of California, Santa Barbara

BS in Mechanical Engineering

10/2020 - 06/2024

GPA: 3.74/4.0

WORK EXPERIENCE

• FoodTools

07/2024 - Present Santa Barbara, CA

- Jr. Mechanical Design Engineer
- Full-time commitment of 40 hours per week
- Designed and developed custom parts for food portioning machines in SolidWorks
- Utilized Fusion 360 Manufacturing to improve the machining process of intricate parts
- Drafted and updated engineering drawings in SolidWorks
- Assisted assembly team in assembling electrical panels, pneumatic control systems, and machinery
- Developed graphical user interfaces (GUIs) with Python to streamline workflow

• Introba

New Technologies Research Intern

Santa Barbara, CA

- Part-time commitment of 10 hours per week
- Worked in an interdisciplinary team of engineers and environmental equity experts to develop the UCSB Clean Energy Master Plan
- Researched energy storage technologies and HVAC systems that were to be implemented in a central utility plant
- Utilized Microsoft Excel to create calculators that modeled the energy usage of buildings around the UCSB campus
- Designed a seawater heat exchange system in SolidWorks

• UCSB Mechanical Engineering Machine Shop

12/2022 - 12/2023

ME12s Remedial Tutor

Santa Barbara, CA

- Supervised 8 students twice per week in the Mechanical Engineering Machine Shop
- Taught students how to use manual lathes, CNC mills, drill presses, measurement tools, and other shop-related equipment
- Guided students in the fabrication of parts for a compressed air motor

• Meissner 06/2023 - 09/2023

Research and Development Intern

Camarillo, CA

- Full-time commitment of 40 hours per week
- Conducted research focused on the characterization of membranes with varying porosities
- Developed test methods for the porosity of membranes in the beta phase of development
- Designed and machined laboratory equipment using manual mills and lathes
- Performed dynamic mechanical analysis using a rheometer to determine the effects of solvents on mechanical properties of epoxies
- Completed formal documentation, technical reports, and presentations to share results and data

PROJECTS

• Senior Capstone Project

09/2023 - 06/2024

Student

Santa Barbara, CA

- Worked in a team of 6 to design a vehicle to be used as a physical therapy device for young children with cerebral palsy or other severe motor impairments
- Integrated brushless DC motors, Arduino microcontroller, and other electrical components into a mechanical system
- Designed and modeled multiple components for the device using SolidWorks
- Utilized finite element analysis to evaluate mechanical components of the system under various loads
- Fabricated major mechanical components using a variety of techniques including manual milling, water jetting, and 3D printing
- Conducted various types of testing to ensure design specifications had been met, including load tests, speed tests, and live testing with children
- Winner of the Distinguished Technical Achievement in Mechanical Engineering award

TECHNICAL SKILLS AND INTERESTS

Skills: MATLAB, SolidWorks, Igor, COMSOL, Python, CAM, Microsoft Office, C++

Areas of Interest: Materials, Design, Mechatronics, Automation, Robotics