Dehao Lin, eit

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Education

University of California, San Diego

Sep. 2021 – Jun. 2024

Bachelor of Science in Mechanical Engineering — GPA: 3.64

La Jolla, CA

Technical Skills

Manufacturing: GD&T, CNC Mill & Lathe, FDM 3D Printing, TIG Welding, Laser Cutting

Design & Software: CAD [SolidWorks, Fusion360, AutoCAD]; Programming [MATLAB, C++, Python]; Microsoft Office Analytical: Static/Dynamic Load Analysis, Finite Element Analysis (FEA), Heat Transfer Analysis

Industry Experience

Craitor, Inc.

Jul. 2023 – Current

System Engineer Internship

San Diego, CA

- Designed components in Fusion360, led to successful MIL-STD-810H vibration test performance.
- Used Fusion360 heat transfer simulation, verified the design's compliance with temperature requirements.
- Responsible for the early phase R&D and component sourcing of a new product concept.

Projects Experience

Pogo Pin Inspection Automation | Cohu, Inc.

Jan. 2024 - Mar. 2024

- Led a team of 3 engineers, successfully delivered a process automation prototype for Cohu, Inc.
- Modeled and fabricated a vibratory bowl feeder for millimeter-scale objects, improved sorting rate 10 times.
- Implemented in-house manufacturing that reduced the cost of a crucial part, resulting \$15,000 in savings.
- Coordinated project planning and design reviews, achieved on-time milestones and project completion.
- Earned ASME San Diego Sector First Place Project Award: Recognized by ASME & UCSD alumni judges and peers.

Rotary Indexer System | Triton Robotics, Inc.

Oct. 2021 - Jun. 2022

- Conducted Root-cause Analysis, identified design and material selection errors that led to previous failures.
- Performed Finite Element Analysis, confirmed material choice, and eliminated risks of geometric constraints.
- Prevented motor stalling by implementing roller and trap mechanisms.

Pick-Lift Machine | MAE Class Project

Sep. 2021- Dec. 2021

- Led a team of 3 engineers to design a forklift to reach objects on rough terrain.
- Performed risk analysis on critical components, prevented two design flaws in the early phase.
- Performed power & gear analysis, ensured machine operated safely within electronics' load limits.
- Earned Best Manufacturing Project from the mechanical engineering instructional team.

Research Experience

UCLA Mechanics of Soft Materials Lab

Jun. 2021 - Aug. 2021

• Built a polarization system to assist in the mechanical testing of Liquid Crystal Elastomers.

Los Angeles, CA

- $\bullet \ \ {\rm Tested \ material \ behavior \ using \ an \ Instron \ load \ frame, \ visualized \ stress-strain \ data \ using \ MATLAB}.$
- Automated data gathering using ImageJ, accelerated research progress by 3 weeks.
- Coauthored Rate-Dependent Stress-Order Coupling in Main-Chain Liquid Crystal Elastomers. Soft Matter, 19, 7923-36.

Military Service

Research Assistant

United States Marine Corps

Aug. 2018 - Feb. 2019

• Active Duty. Medically Separated. Protected Veteran status.

Certifications & Licenses

Engineer In Training | BPELSG Certificate : EIT 181816

Design for Manufacture Certificate | SolidProfessor

May 2024

Jul. 2023