MIA KOBS

https://www.linkedin.com/in/mia-kobs-010767147/

EDUCATION

Dartmouth College—Thayer School of Engineering, Hanover, NH　　　　　　　　　　　**March 2020**
Bachelor of Engineering - Mechanical Engineering　　　　　　　　　　　　　　　　　　　**GPA: 3.62**

WORK EXPERIENCE

Stage 2 Contract Engineering, Farmington Hills, MI　　　　　　　　　　　　　**June 2023-Current**
Mechanical Engineer

- Collaborated in the design of energy storage systems. Created Solidworks models and drawings for proof of concept prototypes, sourced necessary components, and coordinated construction of prototypes.
- Performed analysis on under-performing parts with a CMM and Solidworks Simulation to determine modes of failure. Communicated with overseas manufacturers to resolve manufacturing and design issues that caused failures.
- Modified injection molded components used in pressurized systems to optimize performance. Used a CMM to analyze consistency of key design features when injection molding with different materials.
- Designed custom gauges for inspections of key features in components. Modeled and created drawings in Solidworks.
- Wrote and updated work instructions to document manufacturing processes.

Zakuro, Ann Arbor, MI　　　　　　　　　　　　　　　　　　　　　　　　**June 2021-June 2023**
Mechanical Engineer

- Oversaw mechanical and electrical design through two generations of design builds for equipment to scale up manufacturing processes. Produced timelines for the project, and lead team in determining specifications and requirements for design.
- Performed all circuit design, electrical component selection, and electrical assembly for the scale-up equipment. Designed and maintained the assembly (800+ part) in Solidworks, and generated drawings and other build documentation.
- Sourced manufacturers for custom parts. Managed manufacturers and other vendors to ensure part and equipment arrival.
- Created a lab data collection system using Arduino and Python to automate sensor readings. Designed a PCB for the reader.
- Lead design for various systems to streamline lab processes. Worked with researchers to set requirements.
- Planned and executed engineering design testing for manufacturing scale up equipment and for various custom lab systems.

AutoLung, Remote　　　　　　　　　　　　　　　　　　　　　　　　　**April 2020-April 2021**
Mechanical Engineer—Project Lead

- As project lead, delegated tasks to the team, lead meetings, and created schedules.
- Designed, modeled in Solidworks, and fabricated all mechanical components of AutoLung's Respiratory Assistance Device.
- Wrote Arduino code to operate system sensors and for system controls. Performed wiring for multiple device instances.
- Created detailed build instructions for the AutoLung Respiratory Assistance Device.
- Determined device test requirements and methods, carried out tests, and analyzed data using R. Documented test information.
- Created AutoLung website and applied for grants from social impact foundations and organizations.

Commonwealth Fusion Systems, Cambridge, MA　　　　　　　　　**September 2019-December 2019**
Mechanical Engineering Intern

- Updated designs for test fixtures. Modeled and drew designs in Solidworks, fabricated components, and created documentation.
- Wrote Matlab code to model the winding path for a fusion power research magnet.

Thayer School of Engineering, Hanover, NH　　　　　　　　　　　　　**March 2019-August 2019**
Research Assistant

- Designed housings for systems that use microwaves to image the human body. Used Solidworks to model the design, and a 3D printer, laser cutter, milling machine, and other machine shop equipment to construct components.

DRS Power Technologies, Fitchburg, MA　　　　　　　　　　　　　　**January 2018-June 2018**
Mechanical Engineering Co-op

- Participated in the design and implementation of test plans for materials used in permanent magnet motors.
- Modelled parts and assemblies of proposed designs in Solidworks. Created drawings for proposed designs.

Machine Shop at Thayer School of Engineering, Hanover, NH　　　　　**September 2016-June 2017**
Shop Assistant

SKILLS

Computer: Solidworks, Rhino, Matlab, Python, C, R, Visio, CorelDraw, KiCAD, Aspire, RSLogix 5000
Technical: Arduino, PLC, mill, CNC router, laser-cutter, 3D-printer, waterjet, rapid prototyping, soldering, CMM
Certifications: Certified Solidworks Associate (CSWA)
Languages: Native English, Proficient speaking in Mandarin, adequate writing and speaking abilities in Spanish