

Zhiyi Foo

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Education

University of Wisconsin-Madison

BS Mechanical Engineering

May 2021

Work Experiences

Illumina

Mechanical Engineer II

Hayward, CA

November 2023 - Present

- Led the enclosure ecosystem of the company's on market flagship genome sequencing instrument within the sustainment team. Oversaw the design, development, and maintenance of enclosure-related subassemblies for both ongoing product support and new product introductions.
- Led cross-functional teams in redesigning instrument packaging foam to reduce cost and improve reliability. Oversaw material selection, test fixture design, and vibration testing to simulate shipping conditions.
- Redesigned the instrument's keyboard tray to improve functionality, resulting in a 48% increase in reliability and enhanced user experience, while also simplifying the manufacturing process with a more efficient design.
- Tested and implemented alternative mechanical components that seamlessly replace existing ones without additional manufacturing procedures. Achieved \$300k in annual savings without compromising product quality.

View, Inc.

Mechanical Engineer

Milpitas, CA

January 2022 - November 2023

- Led mechanical design and development of next-gen Smart Window Controller, overseeing project from concept to mass production within 1 year. Designed aluminum enclosure to house PCBA for optimal thermal performance and achieve water and dust ingress rating.
- Led mechanical design of new Smart Window Control Panel which helped overcome power constraints and installation time and reduced Smart Window cost per square foot by 70%.
- Designed and implemented a precision manufacturing fixture for automated and repeatable potting material dispensing, optimizing efficiency and maintaining quality in the production of 2000 units per month.
- Redesigned injection molded housings for manual window controller, achieving a 15% reduction in production costs through manufacturability analysis and CAD modeling for optimized production.

Dürr Universal

Mechanical Designer

Stoughton, WI

May 2021 - December 2021

- Led gas turbine air filtration system's waste water pipe layout design, achieving 30% space savings through innovative arrangement, optimizing cooling and filtration while preserving workspace.
- Designed new mechanical components for gas turbine noise silencers, air filter and management systems.

Attwood Corporation

Engineering Intern

Lowell, MI

September 2020 - December 2020

- Designed and developed mechanical components that improved new trolling motor design's durability.
- Designed and fabricated test fixtures and prototypes with machining tools, 3D printing for design validation.

Technical Skills & Languages

Computer Software: SolidWorks, PTC Creo, NX, MS Office, MATLAB, Simulink, LabView, Python

Technical Skills: CNC Machining, Welding, Woodworking, Laser Cutting, Design for Manufacturability (DFM)
3D Printing, GD&T, Project Management

Languages: English, Mandarin Chinese, Malay