Esther Kuah

esther.kuah@gmail.com
952-992-9228
linkedin.com/in/estherkuah
estherkuah.github.io

Education

Bachelor of Mechanical Engineering, University of Minnesota - Twin Cities **Sept 2019 - May 2022**
College of Science and Engineering, GPA: 3.09

Ford Blue Oval STEM Scholarship, 2019-2022
University of Minnesota Iron Range Scholarship, 2019-2022
Mechanical Engineering Faculty Scholarship, 2021-2022

Experience

Manufacturing Engineer I, Minnetronix Medical **Jun 2022 - Present**

- Manage the production builds of product lines, and stay current with medical device requirements
- Research and maintain technical awareness of new and existing manufacturing processes and trends
- Author ECOs, NMRs, and DAs to exceed build plans, address quality concerns, and improve procedures

Project Engineering Intern, Jack Link's Protein Snacks **Jun 2021 - Aug 2021**

- Organized and managed projects involving vendor relations, internal budgeting, and team safety
- Increased efficiency and organization of areas and equipment with AutoCAD to help save $6.2m annually
- Researched plant operations and communicated with other engineers and cross functional teams

Engineering Intern, Seagate Technology **Jun 2019 - Jul 2019**

- Dispositioned magnetic storage wafers and created reports for failed wafers
- Operated CD-SEM tools and tracked newly designed wafers across the lab for R&D analysis
- Created a Solidworks assembly animation of the wafer process for stakeholders

Projects

VR Haptic Fabric System, Minnetronix Medical | ME 4054W Senior Design **Jan 2022 - May 2022**

- Designed a modular haptic fabric which translated virtual elements into sensory inputs
- Assessed and selected material options to 3D print molds and multilayer cast flexible membranes
- Integrated electrical contacts, IMU sensors, ERM vibration motors, and other EM elements into a fabric

Shelf Optimization, ME 5221 Computer-Assisted Product Realization **Jan 2022 - May 2022**

- Redesigned and injection molded a Walmart shelf for a 64% performance index improvement
- Performed FEA to Creo-designed models using Ansys Workbench and Ansys Mechanical
- Simulated toolpaths, specified processing conditions, manufactured, and performed final part evaluations

Skills

Design / CAD: Ansys, Autodesk Inventor, AutoCAD, Creo, Cura, FEA, Moldflow, Revit, Solidworks
Coding / Software: Arduino, C / C++, Jira, JMP, LabVIEW, Matlab, Microsoft Excel, Python
Manufacturing: 3D Printing, CNC Machining, Injection Molding, Lathe Operation, Laser Cutting / Engraving
Other: Electrical Engineering, Public Speaking, Thermal System Design, Technical Report Writing

Activities

Director of Outreach, She is MechE, Unified and connected women in ME to opportunities 2019 - 2022
Residential Advisor, WISE LLC CA, Led women in STEM and planned events with Medtronic 2021 - 2022
Community and Partnership Outreach, Victoria's Secret PINK Campus Representative 2022 - 2022
Global Finalist, Destination Imagination, Creative, collaborative, problem solving competition 2012 - 2019
Teaching Assistant, CIM, Taught use of engravers, CNC machines, Autodesk, power tools, etc 2018 - 2019