

# 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

**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