

Maria Zemke

Mechanical Engineering

Phone: (865) 255-6719

Email: marialzemke@gmail.com

Education

University of Tennessee Knoxville
Mechanical Engineering BS
Reliability and Maintainability Minor

Predicted Graduation: May 2021
GPA: 3.31

Experience

PepsiCo, Frito-Lay

June 2019- current

Supply Chain/Reliability Intern

Fayetteville, TN

- Created unique solutions to scaling the nonprofit Food For Good, accounting for financials, region choices, products included, and marketing outreach strategies
- Worked in interdisciplinary pod daily to assign tasks and contribute to project progress
- Became familiar with large-scale food industry processes, automation advancements, and sustainability efforts

Oak Ridge National Laboratory

May 2019- current

Student Design Engineer, Undergrad Research Assistant

Oak Ridge, TN

- Designed multiple parts of experiment apparatus capable of maintaining ultra-high vacuum seal
- Drafted P&ID documents of piping, valves, and instruments
- Used several simulation software to map thermal changes over time of designed parts

MTI – a Steel Partners Company

Co-op Design/Prototype Engineer

- Designed and implemented parts requested by personnel on assembly lines, including: machine handles, tool-holding rigs, dynamic tolerance gages, and alignment fixtures
- Served as 3D printing operator i.e. designed parts to be printed, printed parts for other engineers, performed maintenance and upgrades on 3D printer. This resulted in higher printing success rates and higher printing demand within company
- Aided company production by designing tooling used in new motor assemblies under strict time constraints
- Performed weekly audit and update of list of chemicals for prototype assembly lines

Activities/Honors

Ambassador Lead for Engineering Professional Practice- aid students with mock interviews, resume critiques, and general advice toward industry experience. Present to groups about program. Help host several engineering events.

Engineering Mentor Program- meet often with mentee to give advice, tour campus, attend club activities, and provide general guidance

University of Tennessee Volunteer Scholarship – awarded for ACT score of 31

Hope Scholarship with Merit Supplement – awarded for 4.0 GPA in high school, along with AP classes and dual enrollment

Engineering and Personal Skills

Proficient In: SolidWorks, Autodesk Inventor, MS Office Suite, Onshape, Ansys, Comsol

Some Experience In: Python, LabVIEW, MATLAB, Fusion, Blender, R Studio

Soft Skills: Ability to handle multiple tasks/projects at one time, flexible with hours, can communicate effectively with others, honest and reliable work ethic, genuinely excited to learn new material