# **Clayton Hickey**

1530 Centervue Crossing Way, Apt. 205 | Knoxville, TN 37932 hickeyct@ornl.gov | (865) 386-6242

# PROFESSIONAL EXPERIENCE

#### OAK RIDGE NATIONAL LABORATORY (NTRC)

Knoxville, TN / July 2023 - Present

#### Technical Professional

- Responsible for design and assembly of mechanical and electronic hardware systems for 21 separate projects in the first year alone
- Developed CAD models including FEA and renderings. Used data acquisition software for fluid, thermal, and vibration measurement
- Integrated secondary-side electronics and mounted coil for the 270 kW VW project, which won 2024 R&D 100 award and UT-Battelle award

#### FORMULA SAE – PELLISSIPPI STATE MOTORSPORTS

Knoxville, TN / May 2018 – Aug 2022

#### Suspension Team Lead and Alumni Mentor

- Guided the design, manufacturing, build, and testing of suspension components of multiple racecars
- Wrote custom programs to interpret and parse tire data
- Utilized several vehicle design and simulation software to help predict vehicle behavior
- Manufactured composite body panels and wing sections

# OAK RIDGE NATIONAL LABORATORY (NTRC)

Knoxville, TN / Dec 2018 - Aug 2020

#### Laboratory Technician

- Designed printed-circuit boards from electrical circuit schematics
- Worked alongside research and post-doctorate employees to design, test, and troubleshoot electrical systems while sending drawing and schematics for parts manufacturing
- Designed enclosures, packaging, and mounting solutions for electronics for an automotive application

#### DENSO MANUFACTURING TENNESSEE, Inc.

Maryville, TN / May 2017 - Dec 2018

#### *Maintenance Technician (Co-op)*

- Maintained and repaired production processes and equipment, including mechanical assemblies, electrical wiring and components, to ensure minimal downtime
- Worked alongside manufacturing engineers to improve line reliability and implement new processes
- Saved the company over \$90,000 in 2018 by repairing measurement and power modules

# **EDUCATION**

# UNIVERSITY OF TENNESSEE KNOXVILLE

Knoxville, TN | *Aug 2020 – May 2023* 

• B.S. in Mechanical Engineering

#### PELLISSIPPI STATE COMMUNITY COLLEGE

Knoxville, TN | May 2015 - Aug 2020

• A.A.S. Degree in Automated Industrial Systems

# **SKILLS**

- Programs: SolidWorks, MATLAB, LabVIEW, Altium, Microsoft Office Suite, PLC programming
- Familiar with CAD, FEA, mechanical systems, PLCs, computer programming, and basic electrical theories

# References

- Lynn Klett Professor / Program Coordinator over MET department at Pellissippi (865) 335-1615
- Garry Summers DENSO Maintenance Associate (865) 456-4686