

John W. McCollum

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EDUCATION

Bachelor of Science in Mechanical Engineering

Minors: Business Administration, Mathematical Sciences

Clemson University, Clemson, SC

President's List (x3), Dean's List (x3)

May 2019

GPA: 3.52/4.00

EXPERIENCE

Sealed Air Corporation

Supply Chain Intern

Simpsonville, SC

Summer 2018

- Worked with blown plastic film extrusion lines and investigated a quality defect from a line that caused 12% of its produced film to be impounded
- Determined the cause of the defect and completed containment action that reduced the film impounded to 0.8%
- Designed, manufactured, and installed a new edge ripper assembly with the goal to standardize the edge rippers on all blown film lines. The design decreased average high edge from 31 mil to 1 mil over a week of testing
- Reverse engineered mechanical parts of the line in SolidWorks to be accessed in the future by numerous plants

Boeing AerosPACE Program

August 2017-May 2018

- Participant in the two semester Boeing-sponsored Aerospace Partners for the Advancement of Collaborative Engineering (AerosPACE) Program with students from 6 universities across the US
- Worked with a team of 10 students to design, build, and fly a fixed-wing unmanned aerial vehicle (UAV) capable of delivering refrigerated vaccines to remote third-world locations that do not have immediate access to an adequate medical center
- Served as the Manufacturing/Purchasing Team Lead while staying under budget by more than \$1,300

DISH Network

Manufacturing Intern

Spartanburg, SC

Summer 2017

- Worked to automate a re-conditioning operation for the Joey receivers to improve labor efficiency, safety, and ergonomic opportunities
- Proposed implementing a collaborative robot in my design to automate the current manual procedure
- Project payback period was 7 months with significant savings due to a headcount reduction and improved consistency of the process
- Presented my findings and proposal to company executives and manufacturing managers at DISH headquarters in Denver, CO

ZF Transmissions

Quality Problem Solving Intern

Gray Court, SC

Summer 2016

- Investigated quality issues caused by an oil cooler supplier that saved ZF upwards of \$10 million in recall costs
- Implemented strategies to track and reduce the \$300,000+ of monthly scrap throughout the plant
- Created various standardized documents, tools, and fixtures to be used on the production floor
- Improved layout of stations to promote efficiency and guided machine operators to stimulate production

CERTIFICATIONS

Engineer in Training (EIT)

2019-present

SolidWorks Mechanical Design Associate Certification

2015-present

SAS Certified Base Programmer for SAS 9

2019-present

Rockwell Engineering Scholar

2016-2019

MEMBERSHIPS

American Society of Mechanical Engineers

2015-present

American Society of Heating, Refrigerating, and Air-Conditioning Engineers

2016-present

Sigma Chi Eta Psi- Historian & Executive Committee

2014-2018

SKILLS

Windows/Mac OS operating systems, SolidWorks, Microsoft Office Suite, MATLAB, Autodesk Inventor, Dassault 3DEXperience, CATIA, AutoCAD, SAS Base Programming, Finite Element Analysis, ANSYS, Lean Manufacturing, SAP, Time Management, Solid Mechanics, 3D Computer Aided Design (CAD) Software, Kaizen, Red X Problem Solving, Project Management, Process Improvement