
EDUCATION

North Carolina State University*Bachelor of Science in Mechanical Engineering*

GPA: 3.89

*Passed FE Mechanical Exam***December 2020**

Raleigh, NC

May 2020Highlighted Honors/Achievements:

Dean's List (Fall 2016-Spring 2020); HSF Scholar; Andrew Adams Scholarship; NCSHP and Duke Energy Scholarship; worked between 10-20 hours per week throughout academic year.

TECHNICAL SKILLS

Able to obtain clearance ANSYS CATIA(V5) GD&T MATLAB Python Simulink Spanish VBA

PROFESSIONAL EXPERIENCE

Toyota Motor North America, Inc.**June 2020 - Aug 2020**Body Design Engineer Co-op

Saline, MI

- Developed A-Pillar black out tape drawing to ensure compliance with Toyota technical standards and gained agreement on tolerances, datum structures, and material detail from downstream groups.
- Applied section development skills to support body sealer instruction drawing, which is important for water leak prevention, dust entrance prevention, rust prevention, and vehicle appearance.
- Supported sheet metal drawings in preparation for CV emphasizing an adherence to drawing standards.

Toyota Motor North America, Inc.**Aug 2019 - Dec 2019**Body Design Engineer Co-op

Saline, MI

- Improved design of next-generation underbody parts in preparation for 1A build using feedback from vehicle performance development, quality and production engineering, and suppliers.
- Executed root cause analysis as part of countermeasure design study and proposal while considering impact on cost, mass, and performance in order to gain agreement from downstream groups.
- Prototyped clip design to enhance rigidity of HVAC duct assembly while meeting design hardpoints.

Duke Energy Corporation**May 2019 - Aug 2019**Nuclear Engineer Intern

Wilmington, NC

- Collaborated with maintenance, chemistry, operations and environmental teams to provide reactor-building ventilation cooling system with freeze and corrosion protection via propylene glycol solution.
- Optimized piping system for resin transfer to eliminate personnel safety concern and equipment performance issues driven by operations and maintenance while reducing impact and cost of change.
- Executed design verification of pump shaft guard to cover a rotating shaft.
- Submitted revisions to critical stress calculations in response to cryogenic coupling replacements.

ExxonMobil Corporation**May 2018 - Aug 2018**Fixed Equipment Engineer Intern

Baton Rouge, LA

- Redesigned piping system with a new expansion joint and pipe spool to maintain system acidic concentration efficiency and reduce axial stress on inlet connection by 20%.
- Developed new work practice with step-by-step guidance on all applications of external-corrosion protection wrap and emphasized safety guidelines to eliminate unnecessary and costly inspections.
- Improved leak tracking system by trending leaks by year, equipment type, and degradation mechanism.

LEADERSHIP EXPERIENCE

Engineering Ambassador, NC State College of Engineering**May 2017 - Apr 2020**

- Created activities for and mentored K-12 students through weekly STEM outreach programs.
- Instructed 38 engineering transfer students to develop an academic plan and career readiness skills.

President, Society of Hispanic Professional Engineers (SHPE)**May 2018 - May 2019**

- Increased National Conference recruitment and attendance by 200% compared to previous years.
- Organized two community fundraisers and local STEM nights with three high schools.