

Justin DiEmmanuele

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EDUCATION

Florida State University Expected May 2018
Bachelor of Science in Mechanical Engineering GPA: 3.78

WORK & LEADERSHIP EXPERIENCE

GE Aviation Cincinnati, Ohio
Advanced Technology Operations Co-op, Preliminary Engine Design May 2017 – August 2017

- Supporting preliminary mechanical design for new engine programs
 - Scaling LPT from legacy engines to different sizes for preliminary stress calculations for new engines
 - Utilizing NX to analyze part models and find vital information on disks and blades for calculations
 - Using information to create models of stresses that will be experienced at critical areas on the parts
 - Utilizing NX modeling tools to project weight estimates for engines competing for future contracts
 - Delivered engine weight estimates to Airbus as part of a milestone deliverable in preliminary design process
 - Completed weight projections quickly and accurately with no previous experience in NX software

GE Aviation Cincinnati, Ohio
Quality Co-op, Aviation Component Services Center May 2016 – August 2016

- Focus on part protection and quality assurance in engine component repair shop
- No findings or observations through three customer audits during rotation
 - Design and Implementation of part protection with additive technologies
 - Designed part protection to be additively manufactured; resulted in reduction of turnaround time for implementation by 50%
 - Part imaging solution for quality assurance record database
 - Researched possible solutions and met with vendors and experts to discuss needs of the project
 - Selected best solution, initiated preliminary designs, and ordered equipment for execution of the system
 - Brilliant Factory – Program to schedule parts through the machine shop efficiently
 - Compiled and scrubbed large data sets consisting of thousands of lines using VBA and analyzed data for inconsistencies that may pose a problem for programming logic

Applied Superconductivity Center Tallahassee, Florida
Laboratory Assistant, High Critical Temperature Superconductor Research January 2016 – May 2016

- Responsible for taking microscopic images of wire cross sections and conducting measurements and analysis to support research on RBCO superconducting wires
- Worked towards the most efficient repeatable way to polish RBCO wire samples and created documentation for future reference
- Dove into microscope manual to learn to automate image capturing and stitching at high magnifications to reduce process time by about 75% for all microscope users

INVOLVMENT

Society of Hispanic Professional Engineers September 2015 - Present

- Attend national conferences with hundreds of companies offering workshops and potential jobs
- Participate in club events such as guest speaking and social events

American Institute of Aeronautics and Astronautics September 2015 - Present

- Assisted in preliminary design efforts on the materials team for Design Build Fly

SKILLS & INTERESTS

Technical Skills: PTC Creo Parametric (Pro/Engineer), C++. Matlab, Python, Visual Basic for Applications
Interests: Golf, Guitar, Basketball, Cryptocurrencies