# **JUSTIN WAWRZYNIAK**

**Present Address** 

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#### Education

Florida State University, Tallahassee, FL Bachelor of Science in Mechanical Engineering Overall GPA: 3.94 Expected Graduation: May 2018

# Experience/Research

Northrop Grumman Corporation, Melbourne, FL

May 2017 – August 2017

## College Intern Technical - Global Operations

- Learned importance of time management and prioritizing of tasks by assisting on multiple projects simultaneously.
- Worked as a project liaison between the aircraft mechanics, back-shop personnel, and engineers to further develop an understanding of the manufacturing process critical to delivering safe and reliable aircrafts.
- Applied coding and CAD knowledge to debug innovative software to ensure 3D models met NGC producibility standards prior to costly improper fabrication.
- Responsible for the design, creation, and installation instructions of a cargo bay power systems mounting structure.

Northrop Grumman Corporation, Melbourne, FL

May 2016 - August 2016

# **College Intern Technical – Global Operations**

- Seized an amazing opportunity to work with a specialized project group testing the reliability of the new wing configuration of the E-2D Advanced Hawkeye aircraft customized for the Japanese government.
- Used strong communication and problem-solving skills to quickly adapt to the dynamic and complex environment of large scale aircraft manufacturing.
- Utilized NX and extensive knowledge of CAD software to design the wing-fold and wing-tip tubing support structures for the fuel "slosh test" rig which tested the reliability of the new E-2D Advanced Hawkeye wing configuration.
- Conducted engineering drawing revisions and created detailed work instructions for the top-most level assemblies.
- Developed code/scripts to automate SAP input (Bill of Material, Material Master, etc.) for large assemblies with numerous of parts resulting in swifter completion of tasks.

### **Projects/Relevant Coursework**

# **Drone Disabling Device Capstone Project (In Progress)**

- Tasked with the design, development, fabrication, and validation of a device intended to secure a small airspace from typical household drones with cameras or carrying IEDs which pose a threat to public or military safety.
- Opportunity to improve understanding of systems integration and electronic hardware through the development of the detection system, control system, and neutralization system of the device.
- Voted project manager by team due to experience in leadership roles and hard work ethic.

#### Parking and Reversing Turning Aid for Vehicles Design Project

- Lead a team that successfully designed a product as an economical accessory for older vehicles that allowed for easier parking and reversing using low-cost cameras and sensors.
- Expanded knowledge of the design process by developing a product from scratch up through concept selection.
- Achieved the top team out of 16 others for every single week demonstrating strong leadership skills.

#### **Automated Aircraft Takeoff and Landing Simulation Design Project**

- Team designed a mechatronic system that simulates flight automation. Each stage of flying was simulated in this project, from takeoff to landing.
- Software was written in C programming language and implemented using HCS12 microcontroller (Dragon12 Plus) and various motors, switches, and sensors were used as inputs and outputs.

## **Computer Skills**

Coding Experience: MATLAB, C, Python, and C++ coding 3D CAD Design Experience: Pro-E, SolidWorks, NX, AutoCAD

Additional Experience: SAP, MES, Minitab, Microsoft Office programs (Excel, Word, PowerPoint and Outlook)

#### **Memberships**

Florida State University Honors Society, *August 2013 – Present* Society of Hispanic Professional Engineers (SHPE), *September 2015 – Present*