

LANGUAGES AND TOOLS

Java, Python, C, Assembly, Matlab, VBA

Git, Eclipse, Visual Studio Code, Simulink, SolidWorks, CATIA, Patran, FEM

PROJECTS

Section Analysis Tool

Python

GUI application which uses OOP pattern. Tool included in Honda Aircraft standard tool library used to identify critical areas and reduce time spent on analysis of cross sections. Allows for users to generate cross sections of aircraft parts. A full analysis is done on the section which highlights min and max stress points and provides a visualized load distribution.

Class Scheduler

Java

GUI application which uses OOP with singleton, observer and MVC patterns. Application is a representation of a school's class scheduler. Registrars maintain the database of classes, students and teachers. Registrars are also able to edit all classes and enrollment data. Teachers maintain their class list and class roles. Students maintain their class schedule.

IS Ticket System

Java

GUI application which uses OOP with FSM patterns. Application allows for users to create tickets, assign tickets, work tickets and complete tickets. Tickets are displayed in a list with the current state and actions required. Tickets can be edited, created or deleted.

EXPERIENCE

Honda Aircraft Company, LLC.

September 2016 – Current

MRB Stress Engineer

Greensboro, North Carolina

- Developed Python tool to reduce time on complicated sections
- Researched and developed model for complex fasteners to reduce cost of build
- Analyze critical parts to ensure safety of aircraft
- Analyze processes and recommend cost reduction actions

Honda Aircraft Company, LLC.

June 2015 – September 2016

Structural Test Engineer

Greensboro, North Carolina

- Developed test program schematics to perform tensile and fatigue test
- Developed VBA macros to automate data reduction and analysis
- Created process for developing Vision CMM measurement programs
- Created process for correcting alignment on load frames

North Carolina State Aircraft Senior Design

August 2014 – March 2015

Team Lead

Raleigh, North Carolina

- Led a group of 8 other students in order to successfully design VTOL aircraft
- Concentrated on configuration and design of aircraft
- Assisted in Aerodynamics, Stability and Controls, Propulsion, Performance, and Safety

Aerial Robotics Club,

August 2011 – May 2015

Member

Raleigh, North Carolina

- Oversaw flights and recorded data for flight history archive
- Helped build an integrated flying test bed for A/P system
- Developed mathematical model for precision air-drop of simulated medical supplies

EDUCATION

North Carolina State University

August 2010 – May 2015

B.Sc. Aerospace Engineering

Raleigh, North Carolina

3.73 / 4.0 GPA *Magna Cum Laude*

Post-baccalaureate Computer Programming

May 2016 – December 2017

3.90 / 4.0 GPA

Raleigh, North Carolina

HONORS AND AWARDS

AUVSI SUAS, 1st place, Maryland

Summer 2014

NC Space Grant Awardee, NCSU

Summer 2014

AUVSI SUAS, 2nd place, Maryland

Summer 2013