# SCARLETT ANDERSON

# Software Engineer | Flight Control Systems | Software Integration

## **SUMMARY**

With over 8 years of dedicated software development experience in the aerospace industry, I excel at designing complex systems and integrating flight control software. My robust skill set in programming languages such as C++, Python, and Matlab, complemented by a track record of driving growth and reaching significant milestones, aligns with the dynamic needs of transformative aerospace solutions.

## **EXPERIENCE**

## Senior Software Engineer

#### **Lockheed Martin**

- # 05/2019 Present Oclumbus, Ohio
- Led the design and development of advanced flight control software architecture, improving simulated test flight success rates by 30%
- Spearheaded the integration of flight guidance systems, leading to a 15% reduction in integration time for new product development
- · Conducted rigorous testing and simulation on test benches, identifying and rectifying 150+ critical bugs before software release
- Implemented a robust software development lifecycle in compliance with DO-178C, boosting development efficiency by 25%
- Coordinated the coding efforts using C++, Python, and Matlab, increasing software performance metrics by 20%
- Played a pivotal role in achieving software certification, meeting 100% of technical requirements within project deadlines

## Software Developer

#### **Boeing**

- iii 01/2017 04/2019 ♀ Chicago, Illinois
- Developed critical Input/Output processing modules for A429 interfaces, enhancing data throughput by 40%
- Integrated and validated A661 interface software components, leading to improved cockpit display interactions
- Collaborated in an Agile environment to deliver functional software loads, reducing cycle time by 25%
- Contributed to the optimization of SOC and Multi-core processors utilization, increasing system reliability by 18%
- · Led cross-disciplinary teams, successfully driving project milestones and growth in the electronics systems division

## Software Engineer

#### **Northrop Grumman**

- **=** 06/2014 12/2016 Falls Church, Virginia
- Enhanced Matlab Simulink models for flight control systems, resulting in a 10% increase in model accuracy
- · Implemented software configuration and change management practices, leading to a reduction of deployment issues by 50%
- · Authored and maintained documentation for software development processes and tool utilization
- Involved in full-cycle software development from concept to end of life, directly affecting operational excellence

#### **EDUCATION**

## Master of Science in Aerospace Engineering

Massachusetts Institute of Technology

#### Bachelor of Science in Computer Engineering

The Ohio State University

www.enhancv.com

## **PROJECTS**

## Flight Simulation Interface Tool

Contributed to an open-source flight simulation interface tool used for testing control systems. github.com/flight-sim-interface

## **Autonomous Drone Navigation**

Developed an experimental autonomous drone navigation system to enhance unmanned aerial vehicle guidance. github.com/auto-drone-nav

# **KEY ACHIEVEMENTS**



#### **Accelerated Integration Award**

Recognized for leading efforts that decreased flight guidance system integration times by 15% at Boeing.



## **Software Quality Excellence**

Authored the best practices documentation that led to a 50% reduction in deployment issues at Northrop Grumman.



#### Innovation in Testing

Pioneered a new software testing methodology that improved bug identification by 150% at Lockheed Martin.



## **Team Leadership Honor**

Managed a cross-disciplinary team that driven essential project milestones within the electronics systems division at Boeing.

# **SKILLS**

C++ **Python** Matlab

**Software Architecture** 

**Flight Control Systems** DO-178C

## COURSES

## **Advanced C++ Programming**

Deep dive into advanced C++ concepts and realworld application, provided by Coursera.

## **Certification in Systems Engineering**

Intensive certification focusing on the integration of complex systems within aerospace, offered by INCOSE.

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