

Luke Doman

☎ 773-547-4186 | ✉ doman.luke@gmail.com | 📱 ldoman | 🌐 ldoman

Education

Indiana University

Bloomington, IN

B.S. IN COMPUTER SCIENCE

2013 - 2017

- GPA: 3.6
- Selective Student Scholarship Recipient
- Dean's List

Work Experience

Blue Origin

Kent, WA

AVIONICS SOFTWARE ENGINEER

Oct 2019 - Present

- Directly supported the first flight software qualification of the new human-rated New Shepard Crew Capsule.
- Streamlined software qualification processes with tooling for automating verification testing and reporting of collected results.
- Developed and performed verification tests in the Hardware In the Loop (HIL) lab for the Crew Capsule flight software.
- Collaborated with cross-functional teams on anomaly analysis and resolution for issues encountered on the vehicle.

Windhover Labs

Houston, TX

SOFTWARE ENGINEER | LEAD TEST PILOT | PARTNER

Jul 2017 - Aug 2019

- NASA SBIR Phase 2 startup developing safety-critical flight and ground software for Unmanned Aerial Systems (UASs) utilizing custom fork of NASA's Core Flight Software (CFS).
- Author of several apps in the Airliner flight software ecosystem critical for flight. Responsible for full life-cycle development of all authored apps including requirements, architecture, design, implementation, and test.
- Developed the Pyliner scripting engine from concept of operations to initial flight proven version. Pyliner enables autonomous Python scripted drone flight control either on or offboard the vehicle.
- Ensured safe operation and FAA compliance as the Remote Pilot in Command (RPIC) during all flight tests. Led PID and flight parameter tuning efforts to optimize vehicle flight performance. FAA Part 107 Remote Pilot Certification holder.
- Subject matter expert for the Command Ingest (CI) application of an interplanetary spacecraft's flight software as part of contract work. Responsibilities included implementation, unit/verification test, documentation, and technical support for the customer.
- Represented the company at industry conferences. Generated leads to expand the business by marketing products and inline engineering services.
- Performed technical demonstrations of Airliner for NASA, SpaceX, PX4 founders, and numerous others.

NASA Johnson Space Center

Houston, TX

SOFTWARE ENGINEER INTERN

Jun - Dec 2016

- Software Lead for the Database and Reporting Application for Code coverage on Orion (DRACO) tool using Agile methodologies with teams over consecutive internship sessions.
- DRACO's robust reporting features contributed valuable data to be utilized for both the Certification of Flight Readiness and ultimately the improvement of Orion FSW quality.

Rockwell Collins

Cedar Rapids, IA

SOFTWARE ENGINEER CO-OP

Jun - Dec 2015

- Developed an ARINC 664-7 network driver controller used on over 200 lab machines across the world that performed faster and more reliably than previous versions.
- Worked with a senior engineer to develop a major update for aircraft equipment management software with over 300 active users.

Technologies

Languages Python, C, C++, C#, Java, Bash

Databases SQL Server, MySQL, SQLite

Version Control Git, Subversion, GitLab, GitHub, BitBucket

Web Development HTML, CSS, Pug.js, Web2py

Platforms Linux, Microsoft Windows 7-10