Steven Rivadeneira

223 E. Concord Street-Orlando, FL | C: (786) 227-4198 | Email: stevenrr@gatech.edu

Education

Georgia Institute of Technology

08/2019 - 12/2021

M.S in Aeronautics and Astronautics – GPA: 4.0/4.0

Distance Learning

Massachusetts Institute of Technology

08/2013 - 06/2017

B.S in Aeronautics and Astronautics

Cambridge, MA

Relevant Coursework: Intro to Comp Sci, Feedback Control Systems, Automatic Control, Astrodynamics, Dynamics

Experience

Lockheed Martin Corporation

03/2019 - Present

Guidance Navigation and Control Engineer

Orlando, FL

- Lead guidance navigation control standup for the hypersonic missiles: ARRW and TBG in C++ and Simulink.
- Lead ARRW software development of guidance and control algorithms.
- Lead development and implementation of the Air Data Estimator for ARRW using Kalman Filter, C++ and Linux.

Binera, Inc. 08/2017 – 03/2019

Aerospace Engineer / NASA Consultant

Rockville, MD

- Sole developer of crew time model—data munge & analysis used to estimate crew time demands for Mars missions.
- Lead developer of logistics model uses rates to calculate crew logistics requirements to the nearest kilogram.
- Directly supported NASA Langley and HQ in initial design & assessment of Mars human reference architectures.

MIT Senior Design Project – Flight Vehicle Engineering

09/2016 - 06/2017

Undergraduate Student in the Structures Team

Cambridge, MA

- Designed wing spar and joiner through detailed structural analysis, primarily using SolidWorks FEM software
- Tested wing structure for modularity and long endurance, redesigned the wing structure as required.
- Delivered PDR and CDR presentations to our client, Lincoln Laboratory, iteratively improving design over time.

Massachusetts Institute of Technology – Quadcopter Control

09/2016 - 06/2017

Undergraduate Student in Feedback Control Systems course

Cambridge, MA

- Used linear control techniques such as Kalman Filter, LQG, LQR to control and maneuver quadcopter for stable flight
- Implemented and extensively tested the behavior of linear control techniques via Matlab/Simulink, Linux, and C++

MIT Department of Earth Planetary and Atmospheric Sciences

01/2015 - 03/2015

Undergraduate Researcher

Cambridge, MA

- Analyzed orbital trajectory options for cube satellites in LEO using STK as primary software aid
- Performed orbital analysis trade studies to narrow down trajectory options. Primarily used Mathematica.

Skills

- Proficient knowledge of Python, C++, Javascript, MATLAB/Simulink atica and SolidWorks
- English and Spanish: Native/Bilingual proficiency. French: Full professional proficiency

Recognitions, Leadership & Memberships

Phi Beta Lambda National Statistics Competition – First Place Winner (National)