Cell: 708-655-3255 anthonyrihani7@gmail.com Orland Park, IL

EDUCATION

University of Illinois at Urbana-Champaign

Expected Graduation Date: May 2024

Bachelor of Science in Aerospace Engineering, Minors in Computer Science and Mathematics

Dean's List: Spring 2021, Fall 2021 GPA:3.94/4.00

RELEVANT COURSES

- Aerospace Flight Mechanics
- Applied Linear Algebra
- Computer Aided Design
- Differential Equations
- Discrete Mathematics

- Electronics and Circuits
- Incompressible Flow
- Intro to Computer Science I, II
- Numerical Methods
- Thermodynamics

RELEVANT EXPERIENCE

Eggl Research Group

January 2022-Present

Undergraduate Research Assistant

Champaign, IL

- Work with the DiRAC Institute at the University of Washington to add code that will finish the Trailblazer Project, a data repository for satellite streak images
- Develop standardizers for header files of long exposure images from different observatories to be added to the data repository
- Work with Professor Siegfried Eggl to program a satellite ephemeris service that can be used to identify satellites causing a specific trail in astronomical images

Illinois Space Society

August 2021-Present

Spaceshot: Avionics

Champaign, IL

- Collaborate with other avionic sub-teams to upgrade the current avionics bay for a rocket submission to the Spaceport America Cup
- Implement software for the avionics bay to improve the current framework and extend functionality for the rocket to reach the Kármán line

Independent Tutor

August 2020-Present

- Offer tutoring services remotely and assist 10 students remotely in the following fields: Mathematics, Computer Science, Physics
- Instruct students in the following courses and languages: Calculus, Linear Algebra, Algebra, Geometry, Physics: Mechanics, Java, Python

Resident Advisor

August 2021-May 2022

Allen Hall University Housing

Urbana, IL

- Served as a resource to incoming first year students and transfer students living in a University of Illinois residence hall
- Facilitated programs that incorporate the Illinois Residential Experience while also fostering relationships between residents
- Conducted routine nightly checks throughout building to ensure the safety of 600 residents

Tran Research Group

August 2021-December 2021

Undergraduate Research Assistant

Champaign, IL

- Investigated the possibility of improving human-machine collaboration by measuring implicit human feedback through EEG signals
- Developed software to process raw EEG data and detect Error Potentials for machine learning algorithms in later experimentation

SKILLS

- Java (Advanced)
- Python (Advanced)
- AutoDesk AutoCAD (Intermediate)
- AutoDesk Inventor (Intermediate)

- C++ (Intermediate)
- Django (Intermediate)
- Siemens NX (Intermediate)