## Lorenzo Narducci

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EDUCATION University of Maryland College Park, MD

Bachelor of Science in Aerospace Engineering US Citizen

Bachelor of Science in Computer Science Anticipated Graduation: May 2019 First Year Senior GPA: 3.43

VIRTUS Engineering Living and Learning Community Citation: May 2016

SKILLS Computer Languages: C/C++, Python, Java, Ruby, Arduino C, OCaml

Computer Softwares: MATLAB, LATEX, Git, Microsoft Office, Autodesk Inventor

Other Skills: Soldering, general construction, building plastic models

### **EXPERIENCE** Maryland Space Grant Balloon Payload Project

Fall 2015 - Present

High altitude research lab at the University of Maryland that runs experiments on a weather balloon and often pairs with other universities and professors.

- Flew on NASA's High Altitude Student Platfrom (HASP) for a payload that measures high altitude turbulance in combination with a droppable data module
- Help with communication, navigation of tracking vans, and other launch operations during the balloon flights

#### Jet Propulsion Lab

Summer 2017 & 2018

Refactored SEQGEN command modeling software code for Juno mission to explore the viability of new trigger functionality for current and upcoming missions

- Discovered bugs in Juno's current version by creating over 500 test cases for the flight rules modeled in Juno's adaptation of SEQGEN
- Started a Git repository for multi-mission sections of SEQGEN for new missions to be able to draw from
- · Documented methodology for work done so that future work can continue easily

Working on tools for InSight's operations teams that help display power and data models as well as helping show spacecraft commands

- Observed Operational Readiness Test with spacecraft anomalies to evaluate and improve the tools that helped the science and engineering teams make important spacecraft decisions
- Developed unit tests for many back-end functions used by the analysis tools

#### **Autonomous Sand Vehicle Project**

Fall 2014

Designed and constructed a fully automated vehicle to traverse a sand box while avoiding obstacles in order to collect a semi-metallic rock

- $\bullet$  Led design and hardware subgroup team, modeling the design in Autodesk Inventor
- Integrated different prototyping techniques, such as 3D printing and cutting wood parts, to construct the vehicle

#### **YMCA of the Rockies**

Summer 2015

Seasonal staff worker in the industrial laundry room

· Sorted, washed, dried, folded, and packaged linens as well as helping manage laundry room logistics

#### VOLUNTEER WORK

#### Nicaragua

January 2016 & 2017

Week long missions trip to Puerto Cabezas, Nicaragua to help with construction at a local school, playing with orphans, and distributing food at a feeding center and at a prison.

## **Young Life Work Crew**

June 2014

Worked as a volunteer for a month long program serving food and busing tables for family style meals two to three times a day.

#### **Spring Break**

Spring Break 2015 - 2018

Repaired flooring, built decking, and fixed plumbing, and other light construction as a volunteer for Homeworks, an organization similar to Habitat for Humanity.

# ACTIVITES AND LEADERSHIP

MCF

2014 - Present

Student Christian organization that has an on campus worship service and weekly Bible studies as well as organizes social and volunteer activities throughout the semester.

 Part of the leadership board for 2015-2018 with responsibilities like meeting up with other students, organizing social and service activities.

#### **UMD Club Fencing**

2014 - Present

Club sporting group that competes at various competitions and skill levels across the mid-Atlantic region against other colleges both in team events and individual events. Placed third at a college tournament in 2018