ANDREW **ASHLEY**

Pittsburgh, PA· (717)945-8285
ATA33@pitt.edu · Andrew-ashley10.github.io ·www.linkedin.com/in/andrew-ashley
(For more information on projects, skills and more, visit the website listed above)

References:
Mike Formica(President-Neya Systems, Adjunct Professor at CMU): mikef@neyasystems.com
Jeff Hyams(Senior Systems Engineer-Neya Systems): jeffh@neyasystems.com

TECHNICAL SKILLS AND ACTIVITIES

- C++, Java, Python, C, MatLab, C#, SQL, Flask
- ROS and ROS2 experience including vehicle control, perception, planning, and other autonomy
- Unmanned Aerial Vehicle control with Mavlink, MavSDK
- Unmanned Ground Vehicle control with JAUS and ROS
- Mission Planning
- Tensorflow
- sUAS Pilot Certification (Part 107, FAA)
- Aerial Photography and Videography
- Technical Writing
- CAD, through design and simulation
- Trained in Machine Learning techniques such as regression algorithms and neural networks

EXPERIENCE

SEPTEMBER 2020 – CURRENT

RESEARCH ASSISTANT, AIRLAB – CARNEGIE MELLON UNIVERSITY

- Working on testing practical applications with a fully-actuated, omni-directional hexacopter
- Working with robotics control systems development
- Gaining experience testing and integrating on multiple robotics platforms

JANUARY 2019 – CURRENT

ROBOTICS SOFTWARE ENGINEER CO-OP, NEYA SYSTEMS

- Wrote the software that integrated a UAV into a multi-agent planning system
- Gained experience operating and writing autonomy software for ground and aerial systems
- Developed a ROS protocol translation node that increased modularity of system to control multiple systems
- Integrated and debugged autonomy software onto a UAV platform in order to test other software
- Worked with UI designers in order to implement a useful control solution for multi-agent missions
- Received my commercial pilots license for small Unmanned Aerial Systems through the FAA
- Won Student Employee of the Year award from Neya's parent company Applied Research Associates(ARA)

MAY 2018 – AUGUST 2018

APPLICATION DEVELOPER INTERN, LISTRAK

- Researched and proved viability of switching the company's current predictive models to the Tensorflow framework
- Implemented many different Machine Learning algorithms in Tensorflow and compared the efficiency and accuracy to current prediction models
- Built web applications, analyzed client data, worked on data cleansing, planned a hackathon

SEPTEMBER 2017 – MARCH 2018

VOLUNTEER, CENTER FOR SPACE, HIGH-PERFORMANCE, AND RESILIENT COMPUTING (SHREC)

- Tasked with taking online machine learning theory courses and learning TensorFlow Framework
- Worked on image recognition software

EDUCATION

EXPECTED GRADUATION: MAY 2022

COMPUTER ENGINEERING, UNIVERSITY OF PITTSBURGH