Andrew Knee
andrew.knee@ufl.edu

Education

University of Florida, Gainesville, Florida   exp grad May 2024
- Bachelor of Science in Computer Science, Minor in Mathematics
- 4.0 GPA

Allen D. Nease High School, Ponte Vedra, Florida   August 2016 – May 2020
- High School Diploma with International Baccalaureate Diploma
- 4.6 GPA Weighted

Experience

Undergraduate Researcher – Machine Intelligence Lab   August 2020 – Present
- Researched into point cloud registration for estimating object position and rotation.
- Learned more advanced version control methods such as branch control in Git.
- Learned the basics of ROS and how to control robots.

Skills

Software	Microsoft Office Suite, Google Suite, OnShape, Unity, CMake
Fabrication	Power Drill, Dremel, 3D Printer, Soldering Iron, Wire Strippers
Programming	C++, C, C#, Java, Python, TensorFlow, OpenGL, GLM
General Computers	Mac and Apple user for over 10 years, PC building hobbyist.

Leadership

Nease High School Robotics, Ponte Vedra, Florida   August 2019 – May 2020
- Coordinated the different teams to ensure they were building and getting ready for competition.
- Lead my own four-person team and main designer and programmer, led team to win the Judges Award.
- Managed club aspects such as organizing meetings and school activities.

St. Augustine Robotics, Ponte Vedra, Florida   September 2018 – May 2019
- Worked with the team to both design and program the robot for FRC within the 6 weeks build period.
- Competed at the Orlando Regional tournament as the driver for the robot and performed maintenance in between rounds and passed all inspections.

Projects

Image Depth Estimation Research, Ponte Vedra, Florida   August 2019 – January 2020
- Created a generative adversarial network (GAN) to create depth images from regular RGB images.
- Used current research to design the GAN to be accurate and efficient.
- Created a system to determine and read in unpaired RGB-depth images.

Nease High School Bus Schedule App, Ponte Vedra, Florida   May 2019 – May 2020
- Lead a team to design a web application for my high school to easily tell students the ordering of buses in the afternoon.
- Met with the school principal and other district IT officials to determine the criteria and constraints.
- Delegated tasks among me and two others in the group to ensure the project was completed on time.
- Completed testing and produced documentation to ensure long term use.