

ADITYA RAMESH

GitHub: <https://github.com/aramesh10/Personal-Projects>

aditya.ramesh@outlook.com

Cell: (813) 998-5500

Education

Bachelor of Science in Electrical Engineering & Minor in Physics

May 2025

University of Florida, Gainesville, FL

- GPA: 3.81
- Awards: Florida Bright Futures Academic Scholar, Walter F. Blaine Scholarship
- Completed: Circuit 1, C++ Programming for Engineers, Engineering Design & Society, Intro to Modern Physics
- In Progress: Physics of Electrical Engineering, Signals and Systems, Digital Logic and Computer Systems

George M. Steinbrenner High School, Lutz, FL

May 2021

- GPA: 3.96

Skills

-
- Python, C++, Machine Learning, OpenCV, LTspice, MATLAB, Altium, Quartus, Soldering, Lab tools, Microsoft Office

Experience

UF Machine Intelligence Lab (MIL) Undergraduate Researcher

August 2021 – Present

- Worked on a multidisciplinary team of engineers to design and improve the functionality of autonomous water-based vehicles
- Created documentation and wiring diagram for MIL's NaviGator Boat electrical system
- Led the assembly and testing of USB to CAN communication board for the autonomous submarine Subjugator 9
- Developed the Kill board for the autonomous boat Navigator

American Society of Agricultural and Biological Engineers (ASABE) Robotics Team

March 2022 – Present

- Worked on a multidisciplinary team of graduate and undergraduate engineers to design a cotton picking robot
- Developed and implemented navigation algorithms in ROS for Raspberry Pi 4

PCB Projects

December 2021 – Present

- Created PCB in Altium that receives signal from an Arduino and powers a watering pump to water plants
- Created a PCB in Altium that receives an audio signal, removes noise, and amplifies the signal

Machine Learning Projects

July 2021 – Present

- Developed a program that can detect human and cat faces using OpenCV
- Developed a machine learning program in python that uses a previously collected behavioral biometric data from smartphone's accelerometer and gyroscope sensor to predict the activity of the user (e.g., walking, sitting, etc.)

Leadership

Saxophone Section Leader, George M. Steinbrenner High School, Lutz, FL

June 2020 – May 2021

- Managed 30+ saxophone players through marching band season and organized and led section practices
- Mentored future section leaders and other leaders
- Attended workshop on leadership

Community Service

James A. Haley Veterans' Hospital, Tampa, FL during 2019-20

100 Hours

- Assisted the administration staff to access and create copies of patient's medical records upon requests.
- Participated in a project and helped create "brochures" for each physician so that patients are more connected with the doctor.