

2018 Prairie A&M University AUV Team Bio

We are with Prairie View A&M University. This year team consist of Mechanical and Electrical Engineering students. This year AUV team wanted to improve the design, control, and implement the image processing on last year design. For the image processing of the team chose to implement the Gigabyte Motherboard with a Celeron processor to keep the thermal conductivity low. The camera is running through the mini itx pc and connect it to Arduino micro controller. The team programed the camera to look for an image underwater which is the same color as the markers, using Python code to track the target, and Arduino to control the thrusters and follow the target. The Arduino is connected to a MPU 6050 for its accelerometer and gyrocompass to create the IMU. We have refining the code to calibrate the IMU to provide a more accurate IMU for better stability. Controller, thrusters, and image processing are ready for mission.