



Specifications:

Weight: 115lb

Dimensions: 50" x 18" x 18"

Endurance: 6 hours Depth Rating:150 feet

Navigation and Control:

Indirect extended Kalman filter state estimation C3 continuous trajectory generator Fault tolerant thruster mapper Self-contained navigation and control package

Mission Mechanisms:

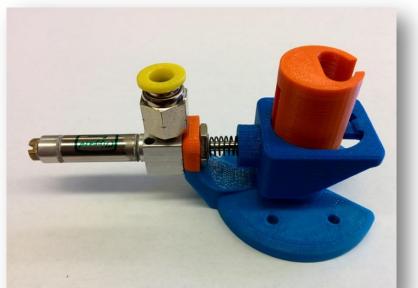
Six independent channels Student designed pneumatic mechanisms

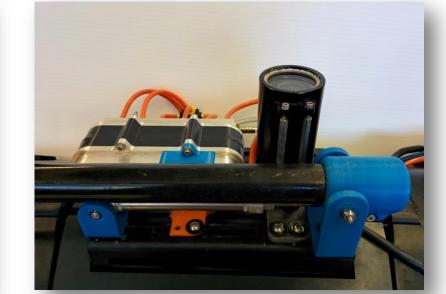


Vehicle Testing:

Sea trials in the Gulf of Mexico

Extensive pool testing

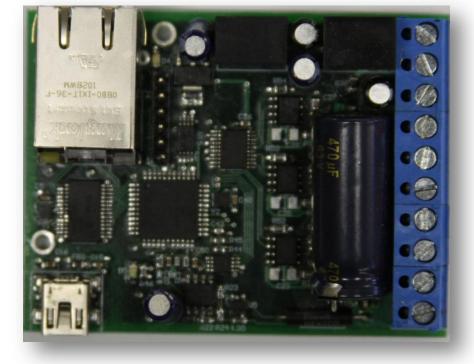




Comprehensive simulation environment Electronics:

UF UNIVERSITY of FLORIDA

COTS Intel-based computer
Student designed motor control modules
On-board power management and monitoring
Standard Ethernet communications
Wet-mate electrical connections
Student designed passive sonar





Software:

Robot Operating System (ROS)

Novel particle filter vision approach

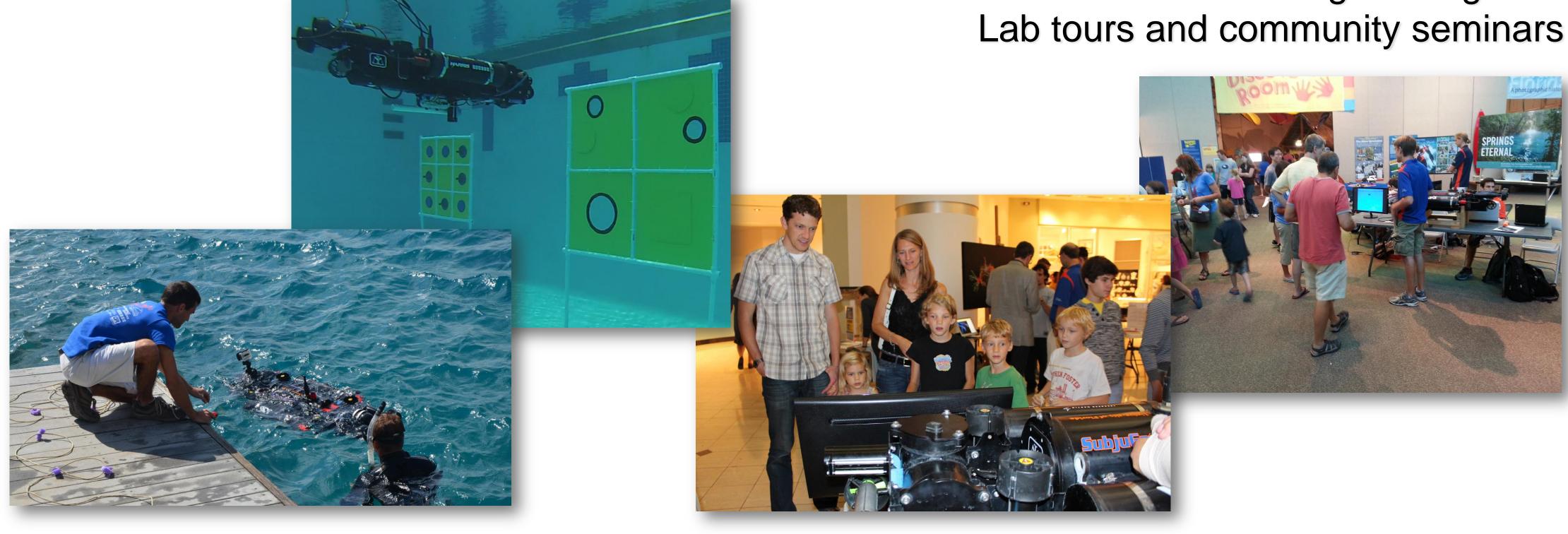
Student designed ROS mission planner

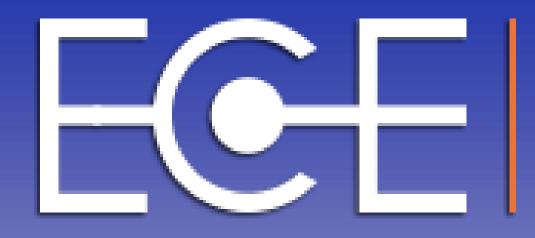
Community Outreach:

Summer introduction to robotics camps

Museums and engineering fairs

Lab tours and community seminars





Department of Electrical & Computer Engineering



























