

## Andrew C. Gray

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Gainesville, Florida



**Goal:** To pursue a career in machine intelligence. My ultimate goal is to lead design teams in crafting innovative robotic projects.

### Education:

Institution	Dates Attended	Field of Study	Degree Obtained	Degree Date
US Naval Academy	2003-07	Systems Engineering	BS	2007
University of Florida (UF)	2012-2013	Electrical and Computer Engineering	MS work completed, degree pending	12/2013
University of Florida	2013-2016	Electrical and Computer Engineering	PhD pending	5/2016

### Special Knowledge:

- Program languages: C, Python, MATLAB
- Proficient with circuit board design and assembly, soldering, Altium circuit board Designer software
- Strong foundation in embedded processing with microcontrollers
- Special training in Aegis Weapons Systems

### Robotic Design:

- Designed and built a GPS-based reverse geo-cache box inspired by Mikal Hart. <https://sites.google.com/site/andrewgrayusna/projects/reverse-geo-cache-box>
- Created GPS heads-up display for a 1998 Ford Ranger showing course and speed over ground. <https://sites.google.com/site/andrewgrayusna/projects/gps-heads-up-display>
- Created, tested, and installed electrical components on autonomous lawn mower InstiGator 2 and competed in the 2012 ION Autonomous Lawn Mower Competition. <http://www.mil.ufl.edu/instigator/>
- Created BirdBuggy, a parrot-guided, self-docking robot. BirdBuggy was featured on the Discovery Channel, CBS News, Wired Magazine, and the Huffington Post, among other media outlets. <https://sites.google.com/site/birdbuggy109/>

### **Project Management:**

- 09/2006 –05/2007: Served as project lead for a 4-person midshipman engineering team. Acquired \$10K from the US Naval Academy. Designed, built, and tested remote-control bomb defusing robot with stereoscopic vision.
- 05/2007 – 07/2009: Supervised the operation, trouble-shooting, and quality assurance of auxiliary equipment worth \$20 million onboard a USN cruiser.
- 07/2009 – 05/2012: Supervised the installation and testing of the Aegis Weapons System during construction of a USN destroyer.
- 10/2010: Identified and replaced 10 radar drivers while the ship was still under warranty, achieving a cost savings of \$2.5 million for the Navy.
- 10/2010 – 05/2012: Ensured \$100+ million phased array radar, supporting equipment, and weapons systems operated at peak performance on the USS JASON DUNHAM (DDG 109) destroyer. Achieved the highest readiness score in the Navy's Atlantic Fleet.
- 05/2012 – present: Conducting systems integration and team organization with SubjuGator, UF's robotic submarine. SubjuGator won second place in the 2013 international Robosub Competition. <http://www.subjugator.org/>
- 10/2012 – present: Leading the UF team in the design and construction of PropaGator, an autonomous boat for international intercollegiate competitions. Won the 2013 international RoboBoat competition. <http://mil.ufl.edu/propagator/>

### **Leadership:**

- 2006-2007: Trained more than 40 midshipmen in preparation for their future careers as Naval officers.
- 2007-2009: Division Officer, led 13 sailors as the auxiliaries officer, USS CAPE ST GEORGE (CG 71).
- 2009-12: Division Officer, led 20 sailors as the fire control officer, USS JASON DUNHAM (DDG 109).
- Leader of 8-person team building PropaGator, UF's autonomous boat.

### **Employment History:**

- 2003-2007: Midshipman, United States Naval Academy
- 2007-2009: Auxiliaries Officer, USS CAPE ST GEORGE (CG 71)
- 2009-2012: Fire Control Officer, USS JASON DUNHAM (DDG 109)

### **Hobbies:**

- Gainesville Cycling Club
- Running