

**Student Research Opportunity Meeting**

Are you interested in Unmanned Aerial Systems (UAS)? Do you want to get involved with research projects in this field? If so, please attend the upcoming meeting where the Autonomous Flight Systems Laboratory ([AFSL](http://www.aa.washington.edu/research/afsl/)) will discuss 3 UAS related projects with opportunities for student involvement during the 2014-2015 academic year.

**What:** UAS Student Research Opportunity Meeting

**Who:** Any UW student (both undergraduate and graduate)

**When:** Sept. 25, 2014, 1:30 – 2:30pm

**Where:** Guggenheim 305

**Why:** Learn more about UAS activities/opportunities in the AA department

**Project 1: AIAA Design, Build, Fly Competition**

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| Each year UW students participate in the AIAA Design, Build, Fly competition. Students design, fabricate, and demonstrate flight capabilities of an unmanned, radio controlled aircraft. Students then compete in an international fly-off in the spring. | DBF 2014 |  | *Left: Students competing in the 2014 DBF competition in Wichita, KS*  *Below: Prototype UW UAS based on a Skywalker 1900 aircraft*C:\Users\Christopher\AppData\Local\Microsoft\Windows\INetCache\Content.Word\WP_20140811_15_29_10_Pro.jpg |

**Project 2: UW UAS**

The UW AFSL is constructing a custom build unmanned aerial system to use as a flight test platform for autonomous algorithms. Students will work with autopilots, vision-based systems, and various sensors in this project.

**Project 3: Algorithms for GPS-Denied Navigation**

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|  | In this project, we seek to develop a control system for UAS operating in GPS-denied environments. The system will allow the vehicle to navigate or maintain an orbit using a combination of visual sensors (cameras) and other sensor inputs.  *Left: Aircraft using a visual anchoring system to stabilize an orbit* |

**For more information, please contact Dr. Christopher Lum (**[**lum@uw.edu**](mailto:lum@uw.edu)**)**