

Workforce Development



An essential component of this CoE is the collaborative development of a next generation workforce in autonomy.

COE universities are highly competitive institutions that attract elite and diversified domestic students from the most populous states

- California, Texas, and Florida are the top three most populous states
- UF and UTA are the flagship schools in Florida and Texas, and 5th and 7th respectively, largest schools by student enrollment in the US
- Duke University as the 8th highest ranked national university
- UF is tied with Georgia Tech as the 8th highest ranked public university
- UTA has the 9th highest ranked college of engineering
- UCSC, UF, and UTA are consistently leaders in the nation in enrollment of Hispanic, African American, and American Indian populations



Student Access

Partially supporting >5 postdocs, >30 PhDs, 5 MS students - **BUT**





Collaborative Interactions

Previous collaborations and tracked metrics going forward

- >60 joint publications between PIs and AFRL/AFOSR researchers
- Ongoing/previous SMART Fellowship students at RW/RV (including multiple retention SMART Fellows)
- AFRL Summer (Space) Scholar (and other) internships (e.g., ~25 former students of the PIs have participated)
- National Research Council (NRC) Research Associateship Program
 - Norman Fitz-Coy AFRL/RV NRC Fellow 2016,
 - Three former/ongoing AFRL/RW NRC Fellows
- Other postdoctoral research opportunities (e.g., five former students have been/currently postdoctoral researchers at the UF REEF,
- AFRL Summer Faculty Fellows program
 - Riccardo Bevilacqua (2012&2015 AFRL/RV, 2019 AFRL/RW)
 - Ricardo Sanfelice (2010 & 2011 AFRL/RV)
 - Ufuk Topcu (2012 AFRL/RQ))



Collaborative Interactions

Workshops

- An annual workshop is proposed which will rotate between geographical locations associated with AFRL/RW/RV/RY
- FINS/FICS workshops (ongoing series)
- Ufuk Topcu provided AFRL workshops on learning, controls, formal methods and human factors and organized an AFOSR workshop on hybrid systems verification and synthesis
- Additional dissemination focused on assured autonomy topics will be organized jointly between the proposing team and AFOSR/AFRL research staff at mainstream technical conferences

Shortcourses & Summer School & etc.

- PIs have a long history of short courses, summer school opportunities (hybrid systems, formal methods imaging, learning, etc)
- Research Monographs & Edited Book
- CSM article



Collaborative Interactions

Educational Opportunities

- Certificate Programs (Autonomous Systems and SSA)
 - Existing certificate programs in
 - Control Systems
 - Information Security (Certified Information Systems Security Professional)
 - Hardware Security
- Ricardo Sanfelice MOOC on CPS
- Electronic course delivery (e.g. UF EDGE)
 - Leverage REEF for AFRL engagement in course offerings
 - Robust Control for Aerodynamic Systems, Structural Dynamics, Systems Management, Introduction to Radar, and Aeroelasticity
 - Why is control important?