Senior Design Projects 2012-2013

TRACSat	Target Recognition and Acquisition Cube Sat (Surrey Satellites LLC)	The TRACSat project encompasses the design, integration and test of a three degree of freedom real-time control system for a cold-gas propulsion unit that will maneuver a prototype.
SCUA	Small Combined Unmanned Aircraft (RECUV)	The purpose of the SCUA project is to design a box wing, separating aircraft.
LoCELS	Low Cost Exploration Landing System (BATC)	The goal of this project is to design a low cost Lunar lander prototype for impact testing on earth.
LEOPARD	Low Earth Orbit Project for the Acquisition and Recovery of Debris (LMCO)	The goal of LEOPARD is to design a system capable of capturing a single object representative of a piece of tracked debris found in Low Earth Orbit
Ice SPEAR	Ice Surface Penetration Experiment for Artic Ice (CU)	This project will design a sensor deployment system to measure ice and ocean characteristics in remote areas by surviving an airdrop landing, penetrating the ice to allow for representative sensor deployment, collecting data, and relaying that information 10 km for analysis
FROS-D	Free-standing Receiver Of Snow Depth (CU)	The goal of the FROS-D project is to design a reliable, cost effective, free-standing snow depth measurement device utilizing the Global Positioning System
TREADS	mulTiple RovEr Acquisition, Deployment, & Storage System (JPL)	The goal of TREADS is to design, build, test, and verify a new Mother Rover capable of storing two Child Rovers and storing a TBD number of samples.
GLADYADR	GLiding Attitude DYnamics And Deployment Research (Escape Dynamics LLC)	The goal of the GLADYADR team is to simulate, test, and verify the gliding performance of a scaled replica of the customer spacecraft during the phase between deployment and ignition
CUGAR	CU Green Aircraft Research (CU)	The goal of CUGAR is to design and implement a serial hybrid gas-electric propulsion system for aircraft
ACES	Auroral Camera for Exploring Space (LASP)	ACES designs and builds a ground-based optical system with thermal control for capturing, storing, and analyzing images of a near-infrared wavelength

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