

JSC Senior Design Project and or Intern Request Form

Project Title:	Live Video Scene Stitching Methods		
Project Description:	<p>This opportunity involves:1) the research into various methods of scene-stitching for live video streams from multiple cameras; 2) definition of desired criteria for scene-stitching for certain space exploration scenarios; 3) trade study of a select few products that provide the various methods identified in (1) and meet the criteria in (2); demonstration of one or more scene-stitching products for scenarios. May require computer programming, camera configuration, video-processing components. If successful we will want to replicate and build upon it at JSC. Resulting code and system specifications should be available for NASA to perform continued experimentation with no licensing fees. If implemented as a senior design project, cameras and computer may be loaned to the university if needed to keep cost down and ease the level of effort to replicate the solution at JSC.</p>		
Choose most appropriate area of research:	<input checked="" type="checkbox"/> Planetary Surface Systems <input type="checkbox"/> Ground Operations <input type="checkbox"/> Propulsion <input checked="" type="checkbox"/> Spacecraft <input checked="" type="checkbox"/> Human Health Program		
Program Applicability	<input type="checkbox"/> ISS <input type="checkbox"/> CEV/SLS <input type="checkbox"/> Commercial Crew <input type="checkbox"/> Asteroid <input checked="" type="checkbox"/> Adv. Technology (AES/STMD)		
Choose one project:	Roles and Responsibilities of Senior Design POC/Mentor		
xSenior Design	<p>I have coordinated with my management and I am able to support at least three (3) teleconferences (kick-off, mid-term, and final) with a Senior Design Project Team at a university that chooses my project. I understand that I shall not provide any sensitive or classified information to the Senior Design Project students or faculty. I will provide feedback to the project team if requested.</p>		
xInternship	<p>I have coordinated with my management and I am able to support an intern. If an intern is selected for my project, I will provide an environment where an intern can grow and we may have a mutually beneficial and successful internship. My project will be able to provide a desk space, work area, and computer for an intern. I will review any final report or presentation that the intern generates during his/her internship and submit it to Export Control (DAA) for approval. This project opportunity will be posted in OSSI, through the office of Education (use exact same title). OSSI website: : https://intern.nasa.gov</p>		
Check desired Timeframe for Internship:	<input type="checkbox"/> Year long <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input type="checkbox"/> Spring		
Check desired Major/Minor(s) for Internship:	<input checked="" type="checkbox"/> Aerospace Engineering <input type="checkbox"/> Aeronautical Engineering <input type="checkbox"/> Astronautical Engineering <input type="checkbox"/> Biomedical Engineering <input type="checkbox"/> Chemical Engineering <input type="checkbox"/> Civil Environmental <input type="checkbox"/> Health Engineering <input checked="" type="checkbox"/> Electrical, Electronic Engineering <input checked="" type="checkbox"/> Computer Engineering <input type="checkbox"/> Engineering Physics <input type="checkbox"/> Industrial Manufacturing Engineering <input type="checkbox"/> Materials, Metallurgical Engineering <input type="checkbox"/> Mechanical Engineering, Mechanics <input type="checkbox"/> Nuclear Engineering <input type="checkbox"/> Astronomy, Astrophysics <input type="checkbox"/> Chemistry <input checked="" type="checkbox"/> Optics <input type="checkbox"/> Physics <input type="checkbox"/> Atmospheric Sciences <input type="checkbox"/> Geography <input type="checkbox"/> Geosciences <input type="checkbox"/> Oceanography <input type="checkbox"/> Natural Resource Management <input type="checkbox"/> Mathematics, Applied Mathematics <input checked="" type="checkbox"/> Computer Science <input type="checkbox"/> Astrobiology <input type="checkbox"/> Biology <input type="checkbox"/> Biochemistry/Biophysics <input type="checkbox"/> Microbiology Bacteriology <input type="checkbox"/> Chemical Engineering <input type="checkbox"/> Other, please specify:		
Mentor Name:	Helen Neighbors	Mentor's E-mail:	helen.neighbors@nasa.gov
Title & Organization:	Computer Engineer	Phone:	#281-483-0811
Alternate POC/Mentor Name:	Max Haddock	Alternate's E-mail:	maxwell.d.haddock@nasa.gov
Education Office Signature and Date:		Intern Mentor's Signature & Date:	

As supervisor/manager, I approve of the above named individual as Senior Design Project POC of Intern Mentor.	Supervisor/Manager's Signature & Date	
(For Intern Request Only) As Administrative Officer, I am aware that the above named Intern Mentor has submitted a request for an Intern.	Administrative Officer's Signature & Date:	