# JSC Senior Design Project and or Intern Request Form

## Project Title:
Live Video Stitching - Zoom Matching

## Project Description:
NASA/JSC desires a general purpose software based solution for stitching live video from multiple cameras together (achieving panoramic view) to allow the user maintain the stitched imagery effect while zooming in on an object of interest. This would enable using external cameras to survey surroundings or exterior of spacecraft and zoom on an area of interest while maintaining spatial awareness of the area of interest with the surroundings.

## Choose most appropriate area of research:
- [X] Planetary Surface Systems
- [ ] Ground Operations
- [ ] Propulsion
- [X] Spacecraft
- [ ] Human Health Program

## Program Applicability:
- [ ] ISS
- [ ] CEV/SLS
- [ ] Commercial Crew
- [ ] Asteroid
- [X] Adv. Technology (AES/STMD)

## Choose one project:

### Roles and Responsibilities of Senior Design POC/Mentor

**Senior Design**

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 of faculty. I will provide feedback to the project team if requested.

**Internship**

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](https://intern.nasa.gov)

## Check desired Timeframe for Internship:
- [ ] Year long
- [ ] Summer
- [ ] Fall
- [ ] Spring

## Check desired Major/Minor(s) for Internship:
- [ ] Aerospace Engineering
- [ ] Aeronautical Engineering
- [ ] Astronautical Engineering
- [ ] Biomedical Engineering
- [ ] Chemical Engineering
- [ ] Civil Environmental Engineering
- [X] Health Engineering
- [X] Electrical, Electronic Engineering
- [X] Computer Engineering
- [ ] Engineering Physics
- [ ] Industrial Manufacturing Engineering
- [ ] Materials, Metallurgical Engineering
- [ ] Mechanical Engineering, Mechanics
- [ ] Nuclear Engineering
- [ ] Astronomy, Astrophysics
- [ ] Chemistry
- [ ] Optics
- [ ] Physics
- [ ] Atmospheric Sciences
- [ ] Geography
- [ ] Geosciences
- [ ] Oceanography
- [ ] Natural Resource Management
- [ ] Mathematics, Applied Mathematics
- [ ] Computer Science
- [ ] Astrobiology
- [ ] Biology
- [ ] Biochemistry/Biophysics
- [ ] Microbiology Bacteriology
- [ ] Chemical Engineering
- [ ] Other, please specify:

## Mentor Name:
Max Haddock

**Mentor’s E-mail:** Maxwell.d.haddock@nasa.gov

## Title & Organization:
Engineer - NASA/JSC Engineering Human Interfaces Branch (EV3)

**Phone #:** 281-483-7241

## Alternate POC/Mentor Name:
Helen Neighbors

**Alternate’s E-mail:** Helen.neighbors-1@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.
(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: |  |