Micro-g NExT Proposal Feedback

Team: Columbia Space Initiative (Columbia University)

Provided are comments and questions posed by the proposal review committee. Please review this information as you proceed to the build phase of this project. The comments and questions are specific to your team's proposal.

Abstract:

- Abstract well-written with basic explanation of the YOLO algorithm and implementation for this specific use case (object detection for SAR purposes)

Design Description:

- Best design description of the top teams. The level of detail including physical data transfer inferfaces showed a level of understanding of the challenge and technical elements required for success.

Manufacturing Plan:

- No manufacturing plan was provided, which detracted from the overall proposal slightly

Sketches/Drawing/CAD:

- Reviewer appreciated the call-outs of specific hardware interfaces between the camera and laptop setup (via bridge, RaspPi and Power Converter)

Overall Design:

- This design has an extremely high probability of success, and the team has an intimate grasp of the software processes unlying challenge success.

Operations Plan:

- Ops plan was very very detailed and reviewer appreciates the level of "fam" steps for each phase for users unaccustomed to the system.

Technical References:

- This team presented all their technical references well and followed standard conventions.

Overall Proposal:

- The team's proposal was detailed and touched upon all technically-relevant issues. The level of detail in the software description of the design was above and beyond anything expected of undergraduate students and makes this team's report stand out among the peer cohort.