NASA SBIR/STTR Technologies

Crew Activity Analyzer (CAA)

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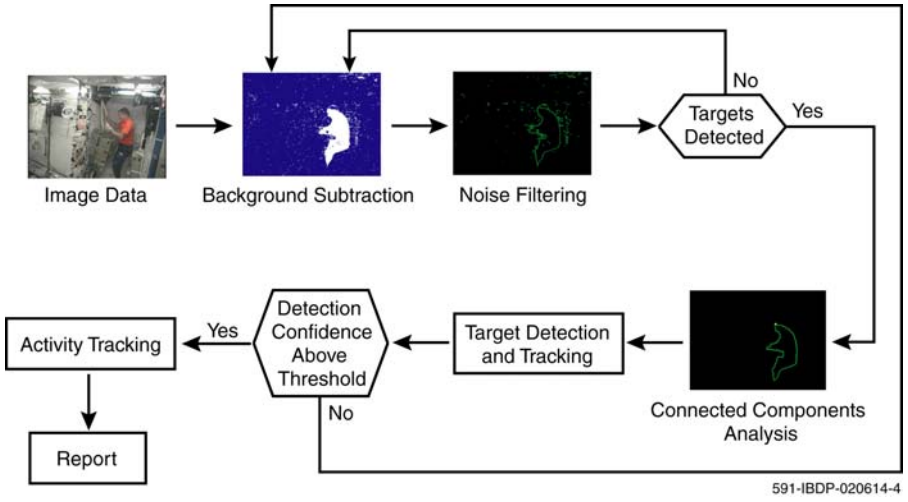
Identification and Significance of Innovation

- Future space missions require planning for human interactions
- Manual processing of image data from earth analogs and simulators time consuming and prone to error
- CAA will use computer vision techniques to analyze image data of crewmember activity, thus increasing accuracy and speed of analysis
- CAA will draw on computer algorithms developed under separate NASA Phase II SBIR



Overview of CAA Processing

Technical Objectives and Work Plan

- Select and prioritize crew activities
- Validate segmentation method
- Develop tracking techniques for individuals
- Perform validation experiments
- Identify necessary refinements in segmentation and tracking methods

NASA and Non-NASA Applications

- Analyze images from earth analogs (e.g., Houghton Mars Project) and simulators (e.g., ISS)
- Research on group interaction and team performance

Contacts

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