

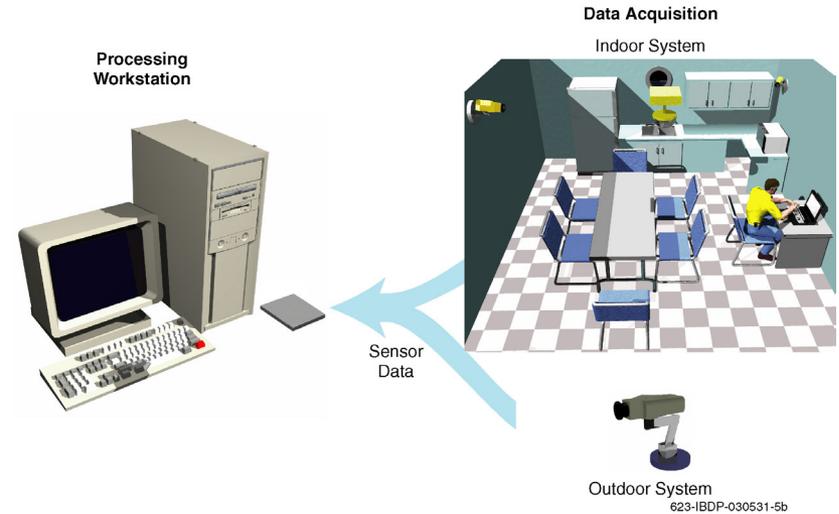


Crew Activity Analyzer (CAA)

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Proposal No.: H2.02-8945

Identification and Significance of Innovation

- Manual processing of image data from earth analogs and simulators time consuming and prone to error,
- CAA is a *compact and portable* system that will use vision and sensing to analyze crew activities, with increased accuracy and efficiency,
- CAA will provide standardized and reliable method for crew activity and human analysis without requiring any other training or infrastructure,
- CAA will draw on methods developed under separate NASA Phase II SBIR



Technical Objectives and Work Plan

- CAA architecture development and prototype creation
- Development of video and sensor data processing methods, extend Phase I work on video data
- Development of multi-sensory data analysis, navigation and query and reporting methods
- Perform validation experiments
- Deliver Prototype System to NASA

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
- Directly applicable to animal behavior research and human health safety and effectiveness markets,
- Extension to security and surveillance systems

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