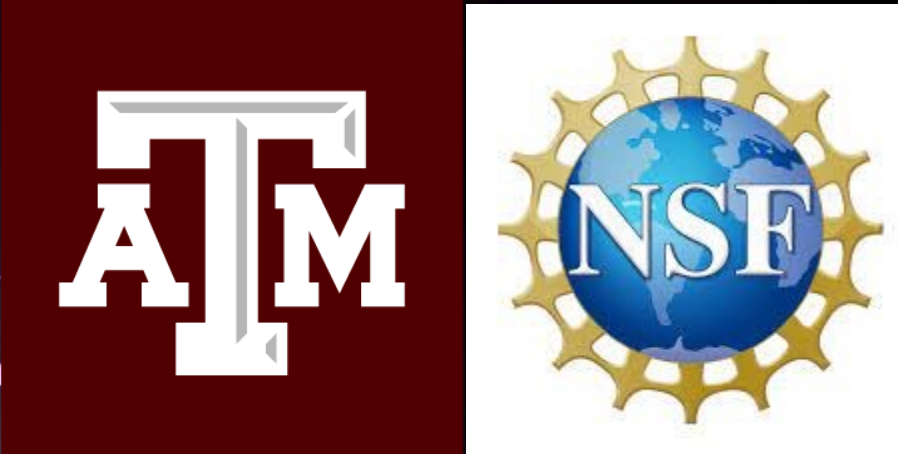# NRI: Human-Robot Interface for Extraterrestrial Construction

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https://www.nsf.gov/awardsearch/showAward?AWD_ID=2221436&HistoricalAwards=false

We leverage the intelligence and capabilities of teleoperators in a human-centric robotic system for extraterrestrial construction by providing human-robot interaction that offers stable, transparent, and accurate telerobotic control.

Challenges and Approach for Space Construction
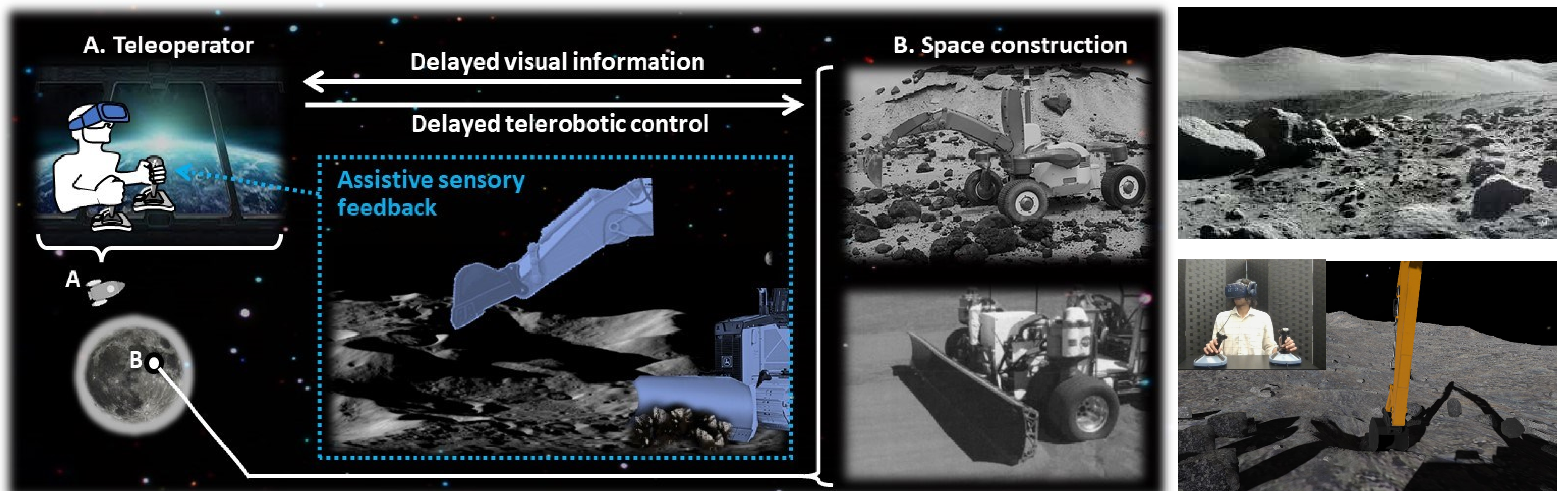
- improve operators' situational awareness and performance on construction tasks with advanced multisensory display of task-relevant data, communicated in an intuitive manner, and without inducing or exacerbating human cognition or dexterity issues.

Broader Impacts

- The findings have important implications for extraterrestrial construction that are essential for a long-term human presence outside of the Earth and training future professionals of future space work domains for extraterrestrial development.

Education and Outreach

- STEM outreach activities to teach young students about space robotics.

- "Space Teams" engaging students in robotic exploration through a virtual online multiplayer simulation/game.