Natural Language Processing for Robotic Communication with Astronauts

Context:

As space exploration advances, the need for seamless communication between robots and astronauts becomes paramount. This project aims to implement Natural Language Processing (NLP) and Sentiment Analysis to enable robots to comprehend astronauts' communication, especially focusing on spatial language nuances and conversations in varied contexts.

Project Description:

The goal of this project is to equip robots with the ability to interpret the tone, intensity, and contextual cues embedded in astronauts' communication. Leveraging NLP techniques, the project aims to train robots to comprehend spatial language nuances and other linguistic cues for informed decision-making during space missions. The objective is to synchronize rover actions with the subtleties and context of astronaut communication, thereby enhancing cooperation and efficiency in space missions.

Tasks:

- Extract sentiments from the speech
- Map these sentiments to rover action's intensity using LLMs

Contact:

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