

Name: HDCP/USC Inspector SCROver

Presenter(s): Eric Gradman, Alex Lam

Objective: To build an autonomous public safety rover that utilizes the JPL-MDS Framework.

Rationale: With a MDS-like rover, dependability technologies can be tested on a system similar to use on JPL-MDS missions

Target Users: HDCP researchers – to be able to test their dependability technologies on a testbed provided by Inspector SCROver. HDCP users – to search for HDCP technologies evaluated on the testbed to improve dependability in their own systems.

Scope: Inspector SCROver will provide a testbed for researchers to test their dependability technologies on code executing JPL-MDS representative missions. Through the use of the HDCP testbed, we hope to be able to increase dependability of code.

Project Type: Research

Runs On: The code can run on a simulator called Stage or on a Pioneer rover.

IPR Status: JPL-MDS Framework owned by Cal-Tech; Adaptation code to run rover owned by USC-CSE; Player/Stage is licensed by the USC Robotics Group

Technical Approach: USC-CSE will adapt the MDS Framework code to create an autonomous rover. In parallel, preparations are underway to create and define a testbed, which will be the method of distribution to the testbed users.

Developers: Eric Gradman, Alex Lam, Steve Meyers

Future Directions: Develop more capabilities for the rover that are similar to capabilities built by the JPL-MDS team for their rover

Demo Description: This demonstration will show what the rover is capable of performing once MDS Framework has been integrated into the system.