Technology 2003

Paper Abstract

Name: Paul Backes *, Mark Long †, Robert Steele †

Position/Title: * Group Leader, † Member of Technical Staff

Affiliation: Jet Propulsion Laboratory

Address:
Mail Stop 196-219
4800 Oak Grove Dr.
Pasadena, CA 91109

Phone Number: 818 354 3850

Fax Number: 818 393 5004

Govt. Agency/Lab The Subject *()**010 (.)* Was: 0(0110) 00 By/For: NASA/JPL

Category: Robotics

Paper Title: An Ada Language Modular Telerobot Task Execution System

Description:

A telerobot task execution system is described which has been developed for space flight applications. The Modular Telerobot Task Execution System (MOTES) provides the remote task execution capability in a local remote telerobotics system. The system provides supervised autonomous control, shared control, and teleoperation for a redundant manipulator. The system is capable of nominal task execution as well as monitoring and teleoperation. A command interpreter is used to interpret commands received from the local site. Execution utilizes multiple control modules which execute based upon command parameterization. The system is written in Ada and runs in a VME environment on 68020 processors and controls a Robotics Research KP20 seven degree-of-freedom manipulator.