Team Information

Name of vehicle: DIEES-CINGO

Team Description: The DIEES-UNICT team is composed of 4 researchers, 3 PhD students, and several students of the Engineering Faculty of the Università degli Studi di Catania, Dipartimento di Ingegneria Elettrica Elettronica e dei Sistemi (DIEES). The Team is leaded by Professor Giovanni Muscato that is the head of the DIEES Service Robotic Group. The DIEES-CINGO robot is a battery powered tracked vehicle. It use two 600W permanent magnet DC motors with unidirectional gearboxes and rubber tracks. The
Team Information

robot chassis is a very simple and robust one. This kind of structure normally is used in agriculture environment. The robot has been equipped with the power control subsystem, a dual core Pentium PC, a stereo camera, a laser scanner and a WiFi connection. Moreover the robot has a ruggedized radiomodem for teleperation and is also equipped with a 6DOF inertial measurement unit and a DGPS receiver. Algorithms for autonomous navigation are under testing. The software is developed in Microsoft Robotic Studio Environment. Till now, different tests with teleoperation and autonomous navigations in a very harsh volcanic environment have been done. Among the others, the robot has been used for materials and equipment transportation (about 200 kg) on the top of the main crater of the Etna Volcano (3330 m osl) starting from the highest point reachable by cars (about 2 km of very rough terrain).

Sponsors: DIEES-UNICT.

Selection of scenario:

1. Reconnaissance and surveillance _X_ (Approach)___
2. Camp security ___
3. Transport ___
4. Mule _X_
5. EOD ___

Proof of citizenship: A copy of team leader passport will do (will not be published)!