

# Team Information



Picture of vehicle:

Name of vehicle:

**Mörri M3**

Picture of team leader:

Name of team leader:

Juha Röning

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Team Description:

The Oulu Robotics Group Team is Oulu University's entry into the C-ELROB2011. The team is composed of faculty and students from of Electrical and Information Engineering, under the leadership of Juha Röning (Professor) and Antti Tikanmäki (Researcher). Our vehicle is called the "Mörri". Mörri is a six wheel solid base robot with very strong motors. The robot has been designed in order to operate in extreme conditions and weathers and with heavy load to carry. Current version M3 will take a part on C-elrob 2011 trials.

The vehicle is actuated via a robust wireless connection. The vehicle contains several sensors to measure movements and

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surrounding environment. This includes 2 laser scanners, omnidirectional camera (LadyBug2), thermal camera, xSens inclinometer and GPS. All sensors take a part on estimation of current state of the robot in the environment. Several autonomous features have been included on-board computer to ease the operation. This includes collision avoidance, route execution, and obstacle analysis and data fusion. Our vehicle is semi-autonomous and human operator's role is to give guidelines to vehicle as it travels on the environment.

Sponsors: -

Selection of scenario: Reconnaissance and surveillance \_\_\_  
Transport – Mule X  
Camp security X  
Autonomous navigation \_\_\_

Proof of citizenship: will follow