

ELROB 2016

20 - 24 June 2016

Eggendorf, Austria

Team Information

Picture of vehicle:



Name of vehicle:

ARTOR (Autonomous Rough Terrain Outdoor Robot)

Picture of team leader:



Name of team leader:

Philipp Krüsi

Team Name:

ARTOR

Team E-mail:

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Logo:

Website:

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Location:

Switzerland

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Team Description:

Team ARTOR is a collaboration between the Autonomous Systems Lab (ASL) at ETH Zurich, RUAG Defence, and armasuisse W+T, under the leadership of Philipp Krüsi (ETH/ASL).

Our robot ARTOR is a 6-wheeled, skid-steered electric vehicle. An array of onboard sensors is used for monitoring the robot's state and gathering information about the environment for online mapping, localization and obstacle avoidance. The equipment includes a rotating 3D laser scanner, two 2D laser scanners, a stereo camera, a GPS receiver and an inertial measurement unit. Furthermore, a pan-tilt-zoom unit containing both a visual and a thermal camera is installed. All data processing for autonomous navigation, including mapping, localization, path planning, obstacle avoidance and motion control, is performed on the onboard computer, using the robot operating system ROS.

Sponsors:

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Selection of scenario:

- Reconnoitring of structures (focus on radiological and nuclear measuring and mapping)
- Mule (shuttle between two locations)
- Movements / Convoying (transport with two vehicles)
- Search & Rescue (SAR) / MedEvac (find and drag a dummy body)
- Reconnaissance and disposal of bombs and explosive devices (EOD/IED; **for professionals only!**)

Proof of citizenship::

A copy of team leader passport will do (will not be published)!

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