

## Vision, Perception and Cognitive Robotics Lab

## **Press Release**

## **First TRADR Joint Exercise**

From September 23<sup>rd</sup> to October 2<sup>nd</sup> the first TRADR Joint Exercise took place at the Tremora hospital (ex American hospital of Calambrone) near Pisa, Italy, in cooperation between the TRADR partners and the firefighters from the Fire Brigade of Pisa. ALCOR lab participated at the exercise with its own UGV and the Gaze Machine. One of the main goals was to integrate and test the system components and afterwards run demos of the first year use cases, with the participation of the end-users, at the hospital site. Moreover, useful data have been collected and component level experiments were run.

The first week was dedicated to the appropriate set-up and test of the system with the necessary integration of the developed functionalities. At the same time, various discussion groups were formulated in order to examine specific issues as for instance planning, reasoning and robot behavior, user interfaces, database technology and system architecture. The first two days, the functionality of the UAVs and the UGVs regarding autonomous navigation, mapping in 3D and high-level planning, was tested. The third day, the firefighters from the Fire Brigade of Pisa offered a demonstration of the canine search team and at the end of the first week everything was perfectly planned and ready for the second phase, where the integrated system was used to run the use cases in the Tremora hospital together with the end-users.

During the second week, missions with the complete system in simulated disaster scenarios were successfully performed. In parallel, members of our lab together with the firefighters have performed various experiments with the Gaze Machine in the hospital, for studying their methodology for assessing the situation in rescue scenarios. The end-users' feedback regarding their experience of using the system and each of its components during the use cases have then been collected and evaluated. Our lab, responsible for the multi-robot planning, and of course the Gaze Machine, has contributed to the successful outcome of the first TRADR Joint Exercise.