FireVision

by Søren Hansen

Imagine a team of firefighters responding to a building fire.

The fire marshall is the first to arrive. He reviews the situation on his Moverio. From the temperature and smoke sensors of the building alarm system he can reconstruct where the fire started and how it spread. This can be shown on a floor plan, on a 3D model or superimposed on his point of view as augmented reality.

From the room sensors of the alarm system, he can reconstruct how the building was evacuated and identify the location of eventual stragglers.

From this he can construct a plan of action for when the rest of the team arrives. Each firefighter can then review the plan on his own Moverio.

During the operation, each firefighter will be able to see the location of every other, as well as the location of people in need of rescue. In case of darkness or heavy smoke, each firefighter can navigate using a projection of the floor plan. To avoid hazards, a map could be built up as hazards and known safe areas are discovered.

Overlaying temperature information from a primitive, personal thermal camera, firefighters can avoid hazards like standing on a floor that might collapse due to a fire below.