**Wide-Area Tracking Tools for Augmented Reality**

**Demonstration Sketch**

**Description:** We are presenting two AR applications. Firstly, a technician-support application provides intuitive in-situ instructions on how a Ubisense wide-area tracking system should be configured. Secondly, a navigation application utilises this newly configured and calibrated tracker, as well as other sensors, adapting to whatever is available in a given locale. In the absence of a large navigable area, the platform will be used to visualize other real and virtual objects that dynamically populate the booth area. Figure 1 shows the layout of the booth, and the deployed hardware.

![Diagram of Ubisense booth with fiducial markers](image)

**Fig. 1.** Ubisense booth, with fiducial markers used for additional tracking in the technician support application, and the navigation application.

**Requirements:** The requirements of the demonstrations are minimal, as we have been invited to use the booth that Ubisense will be renting for the duration of the conference, and our hardware is designed to be lightweight and mobile, consuming little power. In addition to the equipment that Ubisense will be bringing we will have:

1 x handheld AR platform
1 x laptop (acting as a tracking server for the navigation AR application)

We will require access to a wireless LAN, but not necessarily access to the global internet.