Ubisense helps university researchers worldwide discover new location... http://www.cambridgenetwork.co.uk/pooled/articles/BF_NEWSART/...
Ubisense helps university researchers worldwide discover new location-aware applications

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Ubisense, the leading provider of precise, real-time location technology, announced today that more than 60 research institutions worldwide have deployed its real-time location system (RTLS) to conduct groundbreaking research that requires high accuracy location data.

Ubisense delivers the most precise tracking platform available for enterprise-wide deployment. Its sensor-driven ultra-wideband (UWB) technology reports asset and person location within 30 cm of accuracy and in 3D.

Customers such as Columbia University and Graz University of Technology are utilizing Ubisense’s technology to gain real-time visibility into asset location and human movement to improve workflow processes as well as develop innovative location-aware applications.

Columbia University in New York began its work with the Ubisense platform in 2005. The university is working in conjunction with DoCoMo Eurolabs and the National Science Foundation through a Computer and Information Science and Engineering (CISE) research grant to study Session Initiation Protocol- (SIP) enabled applications and services. SIP is a signaling protocol used to establish sessions in an IP network.

Columbia University is combining SIP with the precise location data collected by the Ubisense platform to discover new location-aware applications, such as the ability to automatically tailor communication behavior. For example, communication services could be customized based on specific individuals identified to be present in a room, or a camera may be programmed to follow a speaker by accurately tracking his location and positioning itself accordingly.

'We are impressed with the Ubisense RTLS platform. When we initially determined we needed precise tracking information for our research we conducted a fairly extensive search and found Ubisense was the only high accuracy indoor location system that suited our needs,' said Henning Schulzrinne, professor and chair, Department of Computer Science, Columbia University.

'This technology has significantly enhanced the depth of our research and the types of new applications we have been able to realise.'

Columbia University plans to offer demonstrations of the new services discovered as a result of this research and will publish its findings in a technical report in early 2007.

The Ubisense platform has also been deployed at the Institute for Computer Graphics and Vision at Graz University of Technology in Austria for more than a year.

Graz University of Technology is focusing its research on Augmented Reality (AR) in which computer-generated graphics, sounds and smells can be added to the real-world environment. The Institute of Computer Graphics and Vision is participating in several European Union sponsored research programs on AR, primarily in the fields of medicine and architecture.

Specifically, Graz University is interested in tracking mobile users and augmenting the user’s indoor views with virtual information.

Researchers attach Ubisense sensors to mobile users and can determine the near-exact position of the user. Researchers are then able to display
Ubisense helps university researchers worldwide discover new location information correctly according to the user’s indoor, real-time location.

‘In Augmented Reality we superimpose virtual objects over the real environment so knowing the user’s exact position and orientation is the key to insert the appropriate overlay information. The Ubisense platform gives us this ability,’ said DI Gerhard Schall, research engineer, Graz University of Technology.

‘Using Ubisense we can track several people at the same time and obtain precise location information in a 3D format. This information is extremely valuable in advancing our research that we believe will one day greatly contribute to the mainstream existence of Augmented Reality.’

Graz University of Technology publishes its latest experimental results and research papers on a regular basis at http://www.icg.tu-graz.ac.at/research.

‘We are extremely proud to be affiliated with respected institutions such as Columbia University and Graz University of Technology,’ said Richard Green, CEO Ubisense.

‘We truly believe the innovative applications being discovered using our precise RTLS platform will have a profound and lasting impact across many different industries.’

About Ubisense
Ubisense delivers a precise, real-time location system (RTLS) utilizing ultra-wideband (UWB) technology that locates people and assets within 30 cm in 3D. Customers spanning logistics and manufacturing, workplace, military, healthcare and hazardous environments rely on the innovative Ubisense system to analyze and dramatically improve complex processes resulting in significant operational savings. The company is headquartered in Cambridge, England with offices in Denver, Colorado; Dortmund, Germany; and Singapore.