Using Semantic Web Technology for Ubiquitous Location and Situation Modeling

Stahl Christoph, Heckmann Dominik

Department of Computer Science, Saarland University, P.O. Box 15 11 50, D-66041 Saarbrücken, Germany

Abstract

We use semantic web technology to utilize the world wide web for a large-scale ubiquitous (qualitative and geometric) location model, in order to achieve shareability and extensibility at low operational cost. Our intention is to model location and user characteristics, in order to realize location aware applications with a focus on pedestrian navigation in buildings and situated user interaction. We present the ubiquitous symbolic location and situational context model *UbisWorld* and the tool *Yamamoto* for the modeling of hierarchical geometrical maps.

Keywords

Semantic Web, Hybrid Location Model, Ubiquitous Computing, Pedestrian Navigation, Situated Interaction