Mobile Context Toolbox - an extensible context framework for S60 mobile phones

We describe an open framework utilizing sensors and application data on S60 mobile phones enabling rapid prototyping of context-aware mobile applications. The framework has an extensible layered architecture allowing new sensors and features to be added to the context framework as they become available on mobile phone platforms. The framework provides access to multiple sensors to derive user context, and we present results from experiments with two prototype applications built using the toolbox. Initial experiments have been carried out to validate the data obtained by the tool. In the experiments 14 participants have been continuously using a Nokia N95 mobile phone with a context logger application for an average of 48 days per user and covering 70% of the time. The study has provided valuable insights into the performance issues of the system in real-life usage situations, including the stability of and power consumption in the system.