



CALL FOR POSTERS/DEMOS/VIDEOS

AwareCast 2013: 2nd Workshop on recent advances in behavior prediction and pro-active pervasive computing

<http://www.comtec.eecs.uni-kassel.de/awarecast/>

In conjunction with 2013 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2013)
September 8-9, 2013, in Zurich, Switzerland

Context prediction breaks the border from reaction on past and present stimuli to proactive anticipation of actions. Research directions spread from applications for context prediction over event prediction, architectures for context prediction, data formats and algorithms. Recent work focuses on three main challenges:

1. Prediction beyond location
2. Benchmarks and common data sets
3. Common development frameworks

While there have been contributions targeting some of these challenges, we still see them as unsolved. Thus we invite unique contribution (POSTERS/DEMOS/VIDEOS) addressing these challenges and provide a forum to facilitate collaboration among research groups focusing on context prediction.

Topics of interest include, but are not limited to:

Accurate prediction of seldom events: Important events are frequently also seldom events. How can we train a system on events which are not likely covered by training data sets?

Identification of actions and situations suitable for context prediction: User behaviour is noisy and not necessarily contains patterns which can be predicted. In particular, predictable patterns are frequently interleaved with non-predictable patterns. Inherently, the underlying (stochastic?) process has to feature some regularity or trends.

Continuous learning: User behaviour and habit changes over time. To guarantee constant accuracy, the approach must be able to ‘forget’ patterns which grow unimportant.

Development frameworks: To pave the way for a broader use of context prediction in applications, robust and easy to use frameworks are in need. These frameworks should simplify the development of context prediction applications and preferably be available as open source.

Novel applications: As discussed above, research on context prediction used to focus heavily on location prediction. While contributions dealing with location prediction are welcome, when they address at least one of the other topics, we like to see novel application of context prediction.

Multi-User and Multi-Sensor Prediction: Since humans tend to behave similar, the context time series of other users may be helpful to increase the accuracy of context prediction for similar users. Additionally the utilization of multiple sensors may affect the robustness of the prediction approaches.

Data sets and benchmarks: Currently, comprehensive data-sets are created for context-computing. However, these data-sets are hardly sufficient to be applied for context prediction applications. In particular, data has to be sampled over longer time-spans and cover stochastic processes which are inherently predictable.

Privacy and trust: Shared time series but also the fact that context time series might cover events and actions of remote entities rises questions of privacy and trust.

IMPORTANT DATES:

Submission Deadline: August 28, 2013

Author Notification: within two days after submission

Workshop: September 8, 2013

PROGRAM COMMITTEE:

<http://www.comtec.eecs.uni-kassel.de/awarecast/>

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