Call for Papers

Special Issue on Event Recognition
ACM Transactions on Internet Technology

The concept of event processing is established as a generic computational paradigm in various application fields, ranging from data processing in web environments, over logistics and networking, to finance and medicine. Events report on state changes of a system and its environment. Event recognition (event pattern matching), in turn, refers to the detection of the events that are considered relevant for processing, thereby providing the opportunity to implement reactive measures. Consider, for example, the recognition of emerging stories and trends on the Social Web, the recognition of fraud in electronic marketplaces, and the recognition of non-compliant behaviour in norm-governed multi-agent systems. In each scenario, event recognition is of utmost importance to make sense of large data streams and react accordingly.

We invite quality submissions focusing on various aspects of event recognition. We welcome both theoretical contributions as well as papers describing interesting applications. Broad topics include:

- Event recognition under uncertainty
- Event recognition and forecasting
- Optimisation techniques for event recognition
- Multi-scale temporal aggregation of events
- Machine learning for event recognition
- Verification of event recognition models
- Event-based business process management and modelling
- Real-world applications of event recognition systems
- Middleware for event recognition
- Scalability and high throughput issues
- Event recognition in (norm-governed) multi-agent systems

Key Dates
Submission: 15 October 2013
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Submission Instructions
http://toit.acm.org/submission.html

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