



# The First International Workshop on Scalable Stream Processing Systems (SSPS'07)

April 16-20, 2007, The Marmara Hotel, Istanbul, Turkey

## ***Workshop Description***

In today's world of pervasive networks and ubiquitous computing, people and organizations often rely on time-critical tasks that require accessing data from dynamic information sources and generating responses derived from on-line processing of data in near real-time. In many application domains information sources are increasingly taking the form of data streams, i.e. time ordered series of events or readings. Examples include stock tickers in financial services, link statistics in networking, sensor readings in environmental monitoring, and surveillance data in Homeland Security, to name a few. The ever increasing rates of data stream sources and the stringent response time requirements of stream processing applications force a paradigm shift in how we process data, moving away from the "store and then process" model of database management systems towards the "on-the-fly processing" model of emerging stream processing systems (SPSs). Due to the large and growing number of users, queries, and information sources, as well as the high aggregate rate of data streams distributed across remote sources, scalability becomes a key challenge, necessitating the development of architectures, protocols, and algorithms that can support building highly scalable, available, and reliable SPSs.

This workshop aims at promoting novel research in the area of stream processing systems, looking for bringing together research ideas, concepts, and techniques from the fields of databases, information systems, and distributed systems.

## ***Call for Papers***

**Research topics of interest** for this workshop include, but are not limited to:

- Optimization, processing, placement, and scheduling of queries in SPSs
- Adaptation, load balancing, and dynamic reconfiguration in SPSs
- Quality of service, admission control, and graceful degradation in SPSs
- Failure recovery, fault-tolerance, and reliability in SPSs
- Persistence support and integration of stored data in SPSs
- Data mining and knowledge discovery in SPSs
- Information dissemination and publish/subscribe functionality in SPSs
- Mobile and location-based service support in SPSs
- Peer-to-Peer and overlay network support in SPSs
- Information integration and data source wrapping in SPSs
- Interaction of service oriented architectures and SPSs
- Security and privacy in SPSs
- Benchmarking and performance evaluation in SPSs
- Applications and case-studies in SPSs

Submitted papers will be judged based on novelty of the idea, technical quality, clarity of presentation, and expected impact on future research within the area of focus.

## ***Important Dates***

Paper Submission: November 29, 2006  
Author Notification: January 19, 2007

Camera Ready: TBA  
Workshop day: April 16, 2007

## ***Paper Submission Instructions***

Authors are invited to submit original, unpublished research papers. Submitted manuscripts will be limited to 10 (IEEE Proceedings style) pages and required to be formatted using [the IEEE Proceedings template](#). Please follow the IEEE Computer Society Press Proceedings Author Guidelines to prepare your papers. At least one author is required to attend the workshop and present the paper. Electronic submission of manuscripts (in PDF or Word formats) is required. Submissions should include the paper title, abstract, name of authors, their affiliations, emails addresses, and postal addresses. In addition, the author responsible for correspondence should include his/her telephone number and email address.

Please use the SSPS workshop management system to submit your papers to SSPS 2007 at <https://msrcmt.research.microsoft.com/SSPS2007/>.

## ***Keynote Speaker:***

To be announced.  
Title: TBA

## ***Workshop Chairs:***

Dr. Philip S. Yu  
IBM Thomas J. Watson Research Center  
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## ***Program Committee***

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