

Second Workshop on Tackling Computer Systems Problems with Machine Learning Techniques

(SysML)

<http://www.cs.duke.edu/nicl/sysml07>

April 10, 2007

(Co-located with NSDI 2007)

Goal of workshop and intended audience

Many researchers in machine learning, systems, and networking have begun to apply techniques from machine learning to help make real-world computer systems and networks more robust and manageable. Empirical models built using statistical learning have great potential to help overcome the challenges of scale and complexity in current and future systems.

The purpose of the SysML workshop is to bring together researchers working at the intersection of machine learning and systems. It is intended as a forum for researchers from different communities to “cross-pollinate” and gain perspective on the hard problems and opportunities, methodologies to evaluate learning-based approaches, and the challenges of scaling up to larger, more complex, and more dynamic systems.

Topics and submissions

We invite authors to submit position papers or reports of early work related to current and future applications of machine learning techniques to problems in computer systems.

Topics of interest include, but are not limited to:

- Use of machine learning techniques to address reliability, performance, security, or manageability issues in computer systems
- New applications of machine learning techniques to computer systems problems
- Challenges of scale in applying machine learning to large systems
- Experience with on-line data collection and machine learning analysis
- Integration of machine learning techniques into real-world systems and processes

We particularly encourage submissions describing experience with real-world systems and lessons likely to be generally applicable across a range of systems. Papers will be selected based on originality, technical merit, topical relevance and their likelihood of stimulating discussion at the workshop. Accepted papers will be published on the workshop website, and a proceedings will be distributed at the workshop.

Submission Instructions

Please submit papers in PDF format through the workshop website. The page limit is 6 two-column pages (10pt font, 1 inch margins), including all figures and references. The review process is single-blind: please include the names of the authors and their affiliations on the first page. Please do not submit previously published material. Please do not submit material for simultaneous review in multiple forums. Direct any questions to *sysml07-chairs@cs.duke.edu*.

Important Dates

Submissions due: November 20, 2006

Notification of acceptance: January 25, 2007

Camera-ready copy due: March 1, 2007

Workshop: April 10, 2007

Organizers

Program Co-chairs:

Jeff Chase, Duke University

Ira Cohen, HP Labs

Shivnath Babu, Duke University

Sumit Basu, Microsoft Research

George Forman, HP Labs

Armando Fox, UC Berkeley

Greg Ganger, CMU

Moises Goldszmidt, Microsoft Research

Mike Jordan, UC Berkeley

Randy Katz, UC Berkeley

Emre Kiciman, Microsoft Research

Irina Rish, IBM

Peter Stone, UT Austin

Gerald Tesauro, IBM

John Wroclawski, ISI

Steering Committee:

Moises Goldszmidt, Microsoft Research

Emre Kiciman, Microsoft Research