PerMIS'09
Performance Metrics for Intelligent Systems Workshop
September 21-23, 2009
http://www.isd.mel.nist.gov/PerMIS_2009/

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Location
Washington, D.C. (The workshop will be held at NIST, Gaithersburg MD 20899)

Call for Papers

The Performance Metrics for Intelligent Systems workshop is the only one of its kind dedicated to defining measures and methodologies of evaluating performance of intelligent systems. Started in 2000, the PerMIS series focuses on applications of performance measures to practical problems in commercial, industrial, homeland security, and military applications. It has proved to be an excellent forum for discussions and partnerships, dissemination of ideas, and future collaborations between researchers, graduate students, and practitioners from industry, academia, and government agencies.

The main theme of the ninth iteration of the workshop, PerMIS'09, seeks to address the question: ***Does performance measurement accelerate the pace of advancement for intelligent systems?*** In addition to the main theme, as in previous years, the workshop will focus on applications of performance measures to practical problems in commercial, industrial, homeland security, and military applications. Topic areas include, but are not limited to:

• Defining and measuring aspects of a system:
    The level of autonomy
    Human-robot interaction
    Collaboration & coordination
    Taxonomies
    Biologically inspired models
• Evaluating components within intelligent systems:
    Sensing and perception
    Knowledge representation, world models, ontologies
    Planning and control
    Learning and adapting
    Reasoning
• Infrastructural support for performance evaluation:
    Testbeds and competitions for intercomparisons
    Instrumentation and other measurement tools
    Simulation and modeling support
• Technology readiness measures for intelligent systems
• Benchmarks and applied performance measures in various domains, e.g.,
    Industrial and manufacturing systems
    Intelligent transportation systems
    Emergency response robots (e.g., search and rescue, bomb disposal)
    Homeland security systems
    Defense robotics
    Intelligent systems for hazardous environments (e.g., nuclear remediation)
    Smart grid
    Space robotics
    Medical robotics & assistive devices

The Proceedings of PerMIS are indexed by INSPEC, Compendex, ACM Digital Library, and are released as a NIST Special Publication. Selected papers from past workshops have been published as special issues with the *Journal of Integrated Computer-Aided Engineering* (PerMIS'04) and the *Journal of Field Robotics* (PerMIS'06) and as a *Springer Edited Book Volume* (PerMIS'08).

Submission Information

Prospective authors are requested to submit a draft paper (max. 8 pages) or an extended abstract (1-2 pages) for review. Invited session proposals can also be submitted as draft papers but should contain 1) a session title and a brief statement of purpose, 2) name and affiliation of the organizer(s), and 3) a preliminary list of speakers. All submissions must be written in English, starting with a succinct statement of the problem, the results achieved, their significance, and a comparison with previous work. Papers are to be submitted at *http://www.isd.mel.nist.gov/PerMIS_2009/submission.htm/* using the specified templates.

Important Dates

Submission of full papers	June 17, 2009
Proposal for invited sessions	June 17, 2009
Notification of acceptance	July 24, 2009
Final papers due	August 21, 2009