MALETS 2011
International Workshop on Machine Learning Technologies in Software Engineering

Lawrence, Kansas, U.S.A.
November 12, 2011.

In association with the 26th International Conference on Automated Software Engineering.

ABOUT THE WORKSHOP

Software engineering practitioners and researchers continue to face huge demands in the development and maintenance of software specifications, analysis and design. This is mainly driven by the increased complexity, dynamicity and volatility of software systems as they pose new challenges at each stage of the software engineering process. Adaptability, reliability and resilience are characteristics that software systems (from the systems-in-the-small to the system-in-the-large) must guarantee both at static and run-time level. Machine Learning (ML) techniques have, on the other hand, witnessed advances in methodologies, algorithms and tools, with emphasis on the development of efficient, more expressive and scalable systems. They have played a key role in performing complex tasks in various application domains, but their potential applications in the many fields of computer science including software engineering are still being unfold.

The MALETS workshop aims to provide an interdisciplinary platform where new technologies in Machine Learning and their integration in the software engineering process are presented and discussed. The focus of this workshop is to bring together researchers and practitioners working in the areas of Software Engineering and Machine Learning to discuss existing issues, recent developments, applications, experience reports and novel ideas of application of ML in all aspects of Software Engineering.

Topics of interest are theoretical foundations and practical approaches related, but not limited, to the integration of the following two areas of research:

SOFTWARE ENGINEERING	MACHINE LEARNING
Software requirements elaboration	Inductive learning
Security and fault tolerance	Abductive reasoning
Software reusability	Theory revision
Requirements prioritization	Case-based reasoning
Software quality/reliability estimation	Statistical learning
Self-adaptive systems	Online learning
Risk modeling and analysis	Bayesian inference
Automated software specification	Text Mining
Testing, verification and validation	Explanation-based learning
Autonomic systems	Similarity-based learning
Software design	Genetic algorithms
Process & workflow management	Artificial Neural Networks
Pervasive systems	Data mining
Software effort prediction and cost estimation	
Pervasive systems	
Model-driven and component-based software development	

For further details please visit *http://malets11.doc.ic.ac.uk/*

PAPER SUBMISSION

We invite submissions in either of the following forms:

- Research papers presenting novel approaches and new research results (8 pages).
- Position papers describing new ideas not yet fully developed or preliminary tool support (4 pages).

Submitted papers must be written in English, should not have been submitted for review or published elsewhere and must follow ASE 2011 submission guidelines. Submissions are accepted via easy chair from the workshop homepage.

Authors of best papers will be invited to submit a revised and extended version of their papers to the IET Software journal.

IMPORTANT DATES

Submission deadline: ~~August 26, 2011.~~ September 2, 2011
Author notification: September 30, 2011.
Camera-ready copy: October 21, 2011.

ORGANIZING COMMITTEE

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