



## SCESM'06

5<sup>th</sup> International Workshop on  
Scenarios and State Machines: Models, Algorithms and Tools  
<http://ise.gmu.edu/scesm06>

27 May 2006

### Workshop Organizers

Jon Whittle,  
George Mason U.,  
[jwhittle@ise.gmu.edu](mailto:jwhittle@ise.gmu.edu)

Leif Geiger,  
U. of Kassel,  
[leif.geiger@uni-kassel.de](mailto:leif.geiger@uni-kassel.de)

Michael Meisinger,  
Tech. U. of Munich,  
[meisinge@in.tum.de](mailto:meisinge@in.tum.de)

### Program Committee

Yves Bontemps,  
SmalS-MvM Belgium

Alexander Egyed,  
Teknowledge Corp.

Leif Geiger,  
U. of Kassel

Holger Giese,  
U. of Paderborn

Martin Glinz,  
U. of Zurich

Jean-Marc Jézéquel,  
IRISA, France

Chakraborty Joy,  
Motorola India

Ingolf Krüger,  
U. of California, San Diego

Hillel Kugler,  
New York U.

Stefan Leue,  
U. of Konstanz

Michael Meisinger,  
Tech. U. of Munich

Wilhelm Schäfer,  
U. of Paderborn

Stéphane Somé,  
U. of Ottawa

Tarja Systä,  
Tampere U. of Technology

Sebastian Uchitel,  
Imperial College London

Jon Whittle,  
George Mason U.

Albert Zündorf,  
U. of Kassel

### Goals

Scenarios and state machines are two of the fundamental modeling perspectives for developing behavioral abstractions of complex, reactive software. Scenarios represent a partial view on the interactions between multiple system components; state machines typically model the complete behavior of individual components. Both perspectives have advantages – scenarios are easily understood by stakeholders at all levels, lead naturally to tests and focus on inter-component communication; state machines, on the other hand, provide precise descriptions of component behavior and can be used for generating implementations (either manually or automatically). In particular, UML supports both notations and in UML2.0, scenarios can be modeled in a much more expressive way than with previous versions of UML.

This workshop aims to investigate the connection between scenarios and state machines, assess how this connection can be exploited to improve software development, support the evaluation of techniques that exploit the connection and support the showcasing of developer tools based on both views.

### Paper submissions

SCESM'06 aims to foster discussion and dissemination of fundamental techniques that relate scenario-based software engineering and reactive system modeling with state machines. The following themes have been identified as special topics of interest for this year's workshop although all relevant topics are welcome:

- 1) methodologies for developing with scenarios and state machines;
- 2) the relation to software architecture;
- 3) strategies for model-based testing that combine scenarios and state machines;
- 4) the relation to Model Driven Architecture (MDA).

In addition to these special themes, papers that address the following issues will be particularly welcomed:

- Scenarios/state machines in requirements engineering – simulation and validation of requirements scenarios, use of scenarios/state machines in object-oriented analysis;
- Scenarios/state machines in forward engineering – e.g., synthesis of state machines from scenarios – and in reverse engineering – e.g., generating state machine descriptions from execution traces;
- Notations for scenarios, the trade-offs between intuitive scenario notations, expressiveness and formality;
- Formal and informal analysis of scenarios/state machines, implied scenarios;
- Aspects and scenarios/state machines;
- Scenarios/state machines in application areas such as web services, business process modeling, telecommunications, etc.;
- Scenarios/state machines in test case generation and analysis.

Authors are encouraged to evaluate their techniques on one of the workshop's case studies, details of which are provided on the workshop's website. Authors of tool papers will be given a chance to demonstrate their tools.

Three types of submissions are possible: research papers describe novel, unpublished results and must clearly state their originality and relevance to the workshop; tool papers describe implementations that support the workshop's goals; experience reports describe applications of related techniques in industry. All types of papers are limited to seven pages and must conform to the ICSE2006 submission format and guidelines (<http://www.isr.uci.edu/icse-06/cfp/paperformat.html>). Papers must be submitted electronically, in PDF format, through <http://cyberchair.acm.org/scesmpapers/submit/>

### Important Dates

Paper submissions due  
Notification of acceptance  
Camera-ready versions due

**February 1<sup>st</sup>, 2006**  
March 1<sup>st</sup>, 2006  
March 10<sup>th</sup>, 2006