

Proceedings of
AOM @ AOSD'07
10th Int'l Workshop on Aspect-Oriented Modeling
Vancouver, Canada, 12 March 2007
<http://www.aspect-modeling.org/aosd07/>

held in conjunction with the
6th Int'l Conference on Aspect-Oriented Software Development
Vancouver, Canada, 12-16 March 2007

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Call for Papers

Aspect-orientation is a rapidly advancing technology. New and powerful aspect-oriented programming techniques are presented at many international venues every year. However, it is not clear what features of such techniques are "common aspect-oriented concepts" and what features are rather language-specific specialties. Research in aspect-oriented modeling has the potential to help find such common characteristics from a perspective that is at a more abstract level (i.e., programming language-independent).

The Aspect-Oriented Modeling (AOM) Workshops bring together researchers and practitioners from two communities, aspect-oriented software development (AOSD) and software model engineering. The workshops provide a forum for presenting new ideas and discussing the state of research and practice in modeling various kinds of crosscutting concerns at different levels of abstraction. The goals of the workshops are to identify and discuss the impacts of aspect-oriented technologies on model engineering to provide aspect-oriented software developers with general modeling means to express aspects and their crosscutting relationships onto other software artifacts.

Workshop Topics

For this workshop edition, we have asked for submissions on all topics related to aspects and model engineering including, but not limited to:

Aspect-Oriented Modeling

- Defining essential characteristics of a crosscutting concern that need to be modeled
- Verification and validation of aspect-oriented models
- Composition of aspect-oriented models
- Modeling of aspects at different stages of software development (requirements engineering, software architecture, design, implementation)
- Application of AOM to modeling notations that are not tied to the UML

Aspect-Oriented UML

- Identification of UML elements that can be used to model aspects
- Identification of UML elements that can NOT be used to model aspects
- Aspect-oriented support in UML 2.0
- Extensions to UML for supporting AOSD

AOSD Method and Tool Support

- Aspect-oriented software development methods
- Using existing UML tools in AOSD life-cycles
- New tools and extensions to existing tools to support aspect-oriented modeling

Aspect-Oriented Modeling Case Studies

- Detailed examples that demonstrate how a certain concern can be modeled during software development throughout the different development stages

Model-Oriented AOP and JPM

- join point selection at model levels (model based pointcut languages and model-based join point description, weaving based on model transformation, ...)
- MOF, UML, MDA, ... as a support to the JPM
- model based aspect evolution
- model weaving: from abstract to low-level.
- model engineering tools for supporting aspect-oriented techniques
- model based aspect interference and composition management

Reviewing Process

Prospective participants had been invited to submit 4-6 page position papers following the ACM Format Guidelines. All submissions were reviewed by members of the program and the organizing committee for quality and relevance. Submissions had to be original - papers that had been published previously or that had been simultaneously submitted to other workshops still under review were not permitted. Submitted papers had to be in PDF format and be submitted to: aomwsoc@lists.uni-due.de

Accepted Papers

Scenario Based Resolution of Aspect Interactions With Aspect Interaction Charts i
Shubhanan Bakre, Tzilla Elrad (Illinois Institute of Technology, USA)

Stateful Aspects: The Case for Aspect-Oriented Modeling..... j
Thomas Cottenier (Illinois Institute of Technology, USA), Aswin van den Berg (Motorola Labs, USA), Tzilla Elrad (Illinois Institute of Technology, USA)

Aspects in the Industry Standard AADL k
Dionisio de Niz, Peter H. Feiler (Carnegie Mellon University, USA)

A Meta-Level Specification and Profile for AspectJ in UML l
Joerg Evermann (Victoria University Wellington, New Zealand)

Towards Executable Aspect-Oriented UML Models m
Lidia Fuentes, Pablo Sánchez (Universidad de Málaga, Spain)

XWeave: Models and Aspects in Concert n
Iris Groher (Siemens AG, Germany), Markus Voelter (Independent Consultant, Germany)

Verification of Aspect-UML Models Using Alloy o
Farida Mostefaoui, Julie Vachon (University of Montreal, Canada)

Modeling Traceability of Concerns in Architectural Views..... p
Bedir Tekinerdogan, Christian Hofmann, Mehmet Akşit (University of Twente, The Netherlands)