FOAL '07

Proceedings of the Sixth Workshop on Foundations of Aspect-Oriented Languages

held at the
Sixth International Conference on
Aspect-Oriented Software Development

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Workshop Organizers: Curtis Clifton, Gary T. Leavens, and Mira Mezini

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Preface

Aspect-oriented programming is a paradigm in software engineering and programming languages that promises better support for separation of concerns. The sixth Foundations of Aspect-Oriented Languages (FOAL) workshop was held at the Sixth International Conference on Aspect-Oriented Software Development in Vancouver, Canada, on March 13, 2007. This workshop was designed to be a forum for research in formal foundations of aspect-oriented programming languages. The call for papers announced the areas of interest for FOAL as including: semantics of aspect-oriented languages, specification and verification for such languages, type systems, static analysis, theory of testing, theory of aspect composition, and theory of aspect translation (compilation) and rewriting. The call for papers welcomed all theoretical and foundational studies of foundations of aspect-oriented languages.

The goals of this FOAL workshop were to:

- Make progress on the foundations of aspect-oriented programming languages.
- Exchange ideas about semantics and formal methods for aspect-oriented programming languages.
- Foster interest within the programming language theory and types communities in aspect-oriented programming languages.
- Foster interest within the formal methods community in aspect-oriented programming and the problems of reasoning about aspect-oriented programs.

FOAL logos courtesy of Luca Cardelli

The workshop was organized by Curtis Clifton (Rose-Hulman Institute of Technology), Gary T. Leavens (Iowa State University), and Mira Mezini (Darmstadt University of Technology). The program committee was chaired by Shmuel Katz (Technion–Israel Institute of Technology).

We thank the organizers of AOSD 2007 for hosting the workshop, and Workshops Chairperson William Harrison in particular for his help with Digital Library publication of these proceedings.

Message from the Program Committee Chair

FOAL has become one of the primary venues for work on the formal foundations of aspect languages. The reviewing process for FOAL2007 was, as usual, detailed and thorough, beyond what is typical in a Workshop. Every paper was reviewed by at least three, and generally four, reviewers, who provided constructive criticism and valuable feedback for the authors. The promptness and efforts of the reviewers are greatly appreciated, and have again allowed us to construct an interesting FOAL program. The papers provide a cross-section of work on formal methods and semantics for aspects, from one on refinement for aspects, to papers on type systems for aspects, treatment of dynamic aspects, connections to nonmonotonic logic and monads, and issues in bytecode slicing for aspects.

The members of the program committee were: Curtis Clifton (Rose-Hulman Institute of Technology), Rémi Douence (Ecole des Mines de Nantes, Inria, Lina), Pascal Fradet (INRIA), Stephan Herrmann (Technische Universität Berlin), Alan Jeffrey (Bell Labs), Shmuel Katz (Technion–Israel Institute of Technology), Ralf Lämmel (Microsoft) Gary Leavens (Iowa State University), Karl Lieberherr (Northeastern University), David Lorenz (University of Virginia), Todd Millstein (University of California, Los Angeles), Mira Mezini (Darmstadt University of Technology), James Riely (DePaul University), and Mitchell Wand (Northeastern University).

The sub-reviewers, whom we also thank, were: Ahmed Abdelmeged, Bryan Chadwick, Christine Hang, and Therapon Skotiniotis.

I would also like to warmly thank the organizing committee of FOAL, Curtis Clifton, Gary Leavens, and Mira Mezini, for their untiring work in bringing together the various elements needed to create a vibrant workshop.

Shmuel Katz
FOAL '07 Program Chair
Technion–Israel Institute of Technology