

PEPM2006

Charleston, South Carolina

Call For Papers **ACM SIGPLAN 2006 Workshop on Partial Evaluation and Program Manipulation (PEPM'06)** **Charleston, South Carolina, January 9-10, 2006 (Associated with POPL 2006)** **(<http://www.cis.ksu.edu/santos/pepm06>)**

The PEPM Symposium/Workshop series aims to bring together researchers and practitioners working in the areas of program manipulation, partial evaluation, and program generation. PEPM focuses on techniques, supporting theory, tools, and applications of the analysis and manipulation of programs.

The 2006 PEPM workshop will be based on a broad interpretation of semantics-based program manipulation. This year, a concerted effort will be made to expand the scope of PEPM significantly beyond the traditionally covered areas of partial evaluation and specialization and include practical applications of program transformations such as refactoring tools, and practical implementation techniques such as rule-based transformation systems. In addition, the scope of PEPM will be broadened to cover manipulation and transformations of program and system representations such as structural and semantic models that occur in the context of model-driven development. In order to reach out to practitioners, a separate category of tool demonstration papers will be solicited.

Topics of interest for PEPM'06 include, but are not limited to:

- Program and model manipulation techniques such as transformations driven by rules, patterns, or analyses, partial evaluation, specialization, slicing, symbolic execution, refactoring, aspect weaving, decompilation, and obfuscation.
- Program analysis techniques that are used to drive program/model manipulation such as abstract interpretation, static analysis, binding-time analysis, dynamic analysis, constraint solving, and type systems.
- Analysis and transformation for programs/models with advanced features such as objects, generics, ownership types, aspects, reflection, XML type systems, component frameworks, and middleware.
- Techniques that treat programs/models as data objects including meta-programming, generative programming, model-driven program generation and transformation.
- Application of the above techniques including experimental studies, engineering needed for scalability, and benchmarking in a wide variety of domains including source code manipulation, domain-specific language implementations, scientific computing, middleware frameworks and infrastructure needed for distributed and web-based applications.

We especially encourage papers that break new ground including descriptions of how program/model manipulation tools can be integrated into realistic software development processes, descriptions of robust tools capable of effectively handling realistic applications, and new areas of application such as rapidly evolving systems, distributed and web-based programming including middleware manipulation, model-driven development, and on-the-fly program adaptation driven by run-time or statistical analysis.

Submission Categories, Guidelines, and Proceedings: Regular Research Papers must not exceed 10 pages in ACM Proceedings style. Tool demonstration papers must not exceed 4 pages in ACM Proceedings style, and authors will be expected to present a live demonstration of the described tool at the workshop. Suggested topics, evaluation criteria, and writing guidelines for both research tool demonstration papers will be made available on the PEPM'06 Web-site. Papers should be submitted electronically via the workshop web site. We plan to publish the workshop proceedings in ACM SIGPLAN Notices (with full papers appearing in the ACM Digital Library) and selected papers will be invited for a journal special issue dedicated to PEPM'06.

Important Dates:

Submission: October 7, 2005 Apia, 11:59pm, Samoan time (firm deadline, no extensions)
Notification: November 18, 2005
Camera-Ready Paper: December 16, 2005.

Workshop co-Chairs: (see opposite side for program committee)

John Hatcliff, Kansas State University, USA

Frank Tip, IBM T.J. Watson Research Center, USA

PEPM 2006 Program Committee: (see opposite side for PEPM 2006 Call for Papers)

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