Preface

This volume constitutes the proceedings of the first ACM SIGPLAN/SIGSOFT International Conference on Generative Programming and Component Engineering (GPCE 2002), held October 6–8, 2002, in Pittsburgh, PA, USA, as part of the PLI 2002 event, which also included ICFP, PPDP, and affiliated workshops.

The future of Software Engineering lies in the automation of tasks that are performed manually today. Generative Programming (developing programs that synthesize other programs), Component Engineering (raising the level of modularization and analysis in application design), and Domain-Specific Languages (elevating program specifications to compact domain-specific notations that are easier to write and maintain) are key technologies for automating program development. In a time of conference and workshop proliferation, GPCE represents a counter-trend in the merging of two distinct communities with strongly overlapping interests: the Generative and Component-Based Software Engineering Conference (GCSE) and the International Workshop on the Semantics, Applications, and Implementation of Program Generation (SAIG). Researchers in the GCSE community address the topic of program automation from a contemporary software engineering viewpoint; SAIG correspondingly represents a community attacking automation from a more formal programming languages viewpoint. Together, their combination provides the depth of theory and practice that one would expect in a premier research conference.

Three prominent PLI invited speakers lectured at GPCE 2002: Neil Jones (University of Copenhagen), Catuscia Palamidessi (Penn State University), and Janos Sztipanovits (Vanderbilt University).

GPCE 2002 received 39 submissions, of which 18 were accepted. The topics included generative programming, metaprogramming and program specialization, program analysis and program transformation, domain-specific languages, software architectures, and aspect-oriented programming. Two different program committees, each representative of the GCSE and SAIG communities, jointly reviewed the submissions. The vast majority of the papers could have been submitted to either conference had a merger not occurred. Referees from *both* communities agreed on the acceptance of such papers, and in no case was there disagreement about such papers. More than anything else, this unity of viewpoint underscores the need for community integration.

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July 2002   Don Batory, Charles Consel, and Walid Taha

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