

## CALL FOR PAPERS



### The ACM SIGPLAN/SIGSOFT Conference on **Generative Programming and Component Engineering (GPCE'02)**



A joint event of [GCSE](#) and [SAIG](#). (Formerly called GCSE/SAIG'02). Part of [PLI'02](#), Pittsburgh, PA, October 6-8, 2002.

**Invited Speakers:**                      [Neil Jones](#)                      [Catuscia Palamidessi](#)                      [Janos Sztipanovits](#)  
University of Copenhagen              Penn State University              Vanderbilt University

Program generation has the prospect of being an integral part of a wide range of software development processes. Many recent studies investigate different aspects of program generation, including their semantics, their application, and their implementation. Existing theories and systems address both high-level (source) language and low-level (machine) language generation. A number of programming languages now support program generation and manipulation, with different goals, implementation techniques, and applications. The goal of this conference is to provide a meeting place for researchers and practitioners interested in this topic. A particular area of interest is component-based software development, which bears the promise of considerable productivity increases to software development comparable to the introduction of the assembly line in manufacturing. But due to the very same sophistication that makes components useful, their maintenance can be hard. Generative programming presents a promising approach to alleviating the above problems, as changes affecting components can now be more effectively managed during the generation process rather than at the component level. The goal of this joint event is to foster further cross-fertilization between the software engineering research community on the one hand, and the programming languages community on the other, in addition to supporting the original research goals of both GCSE and SAIG communities. We seek papers both in software engineering and programming languages, and especially those that bridge the gap. Being accessible to both communities at the same time is also valued. The conference solicits submissions related (but not limited) to:

- Generative Programming: Reuse, meta-programming, partial evaluation, multi-stage and multi-level languages,
- Semantics, type systems, symbolic computation, linking and explicit substitution, in-lining and macros, templates, program transformation,
- Runtime code generation, compilation, active libraries, synthesis from specifications, development methods, generation of non-code artifacts, formal methods. Reflection.
- Product Lines and architectures
- Industrial Applications
- Component-Based Software Engineering: Reuse, distributed platforms, distributed systems, evolution, analysis and design patterns, development methods, formal methods
- Integration of Generative and Component-Based Approaches
- Domain Engineering, analysis, and languages
- Separation of Concerns: Aspect-Oriented Programming, Intentional Programming, and Multi-Dimensional Separation of Concerns

Reports on **applications of these techniques to real-world problems** are especially encouraged, as are submissions that relate ideas and concepts from several of these topics, or bridge the gap between theory and practice. The program committee is happy to advise on the appropriateness of a particular subject.

**Submission Details:** Authors are invited to submit papers of at most 5000 words (excluding figures), in postscript format (letter or A4), using the [electronic submission form](#) by **March 21st, 2002**. This deadline is **firm**. Both position and technical papers are welcome (Please indicate at time of submission.) Authors will be notified of acceptance by *May 14th, 2002*. Final version of the papers must be submitted by *July 14, 2002*.

**Special Note on Combined Event:** While the Program Committee is divided into two focus areas corresponding the parent events (GCSE and SAIG), there will be one unified program committee meeting. At the time of submission, authors must indicate whether they intend the paper for the GCSE audience, SAIG audience, or BOTH. The last category is the default, and is strongly encouraged. Papers submitted explicitly to only one focus will be accepted or rejected by the respective Program Chair. For papers submitted to BOTH, it is enough that one of the two Program Chairs accepts the paper. All members of the PC will be allowed to bid for and review all papers, and cross-bidding is encouraged. The conference itself will not be divided along focus lines. Rather, an attempt will be made to ensure that each session is of interest to both parent communities.

**General Chair:** [Walid Taha](#), Yale University, USA.

**Program Chair (GCSE focus)**

[Don Batory](#), University of Texas at Austin, USA.

**Program Committee:**

[Jan Bosch](#), University of Groningen

[Greg Butler](#), Concordia University

[Prem Devanbu](#), University of California at Davis

[Cristina Gacek](#), University of Newcastle upon Tyne

[Stan Jarzabek](#), National University of Singapore

[Kyo Kang](#), Pohang University of Science and Technology

[Peter Knauber](#), Fraunhofer Institute

[Hausi Muller](#), University of Victoria

[Nenad Medvidovic](#), University of Southern California

[Wolfgang Pree](#), University of Constance

[Yannis Smaragdakis](#), Georgia Tech

[Douglas R. Smith](#), Kestrel Institute

**Program Chair (SAIG focus):**

[Charles Consel](#), INRIA, LaBRI, France.

**Program Committee:**

[Craig Chambers](#), University of Washington

[Shigeru Chiba](#), Tokyo Institute of Technology

[Pierre Cointe](#), Ecole des Mines de Nantes

[Dawson Engler](#), Stanford University

[Siau cheng Khoo](#), National University of Singapore

[Gregor Kiczales](#), University of British Columbia

[Martin Odersky](#), EPFL

[Calton Pu](#), Georgia Tech

[Peter Thiemann](#), Universität Freiburg

[Andrew Tolmach](#), Portland State University

**Format:** The three day conference will contain slots for technical papers (45 minutes) and position papers (30 minutes). Both times include discussion. Position papers are expected to describe important future directions, ongoing work, and survey previous results. This category is best thought of as one for "competitive invited papers". Technical papers are expected to contain novel results. All papers will be reviewed by the program committee for the above-mentioned criteria, in addition to correctness and clarity. Simultaneous submission to other venues and submission of previously published material are not allowed. There will be time

allocated for open discussions at the end of the conference. Proceedings will be published as an [LNCS](#) volume.