



Call for Contributions
**Second International Conference on
 Generative Programming and Component Engineering (GPCE'03)**
 In Cooperation with ACM SIGPLAN and SIGSOFT
 Part of NetObjectDays'03, Erfurt, Germany, September 22-25, 2003, <http://gpce.org>



Generative and component approaches have the potential to revolutionize software development in a similar way as automation and components revolutionized manufacturing. 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. GPCE arose as a joint conference, merging the prior conference on Generative and Component-Based Software Engineering (GCSE) and the Workshop on Semantics, Applications, and Implementation of Program Generation (SAIG). The goal of GPCE is to provide a meeting place for researchers and practitioners interested in cutting edge approaches to software development. Thanks to the co-location with NetObjectDays'03, one of the largest main-stream software development conferences in Germany, the GPCE'03 presentations are expected to have a high attendance by industry practitioners, in addition to regular conference attendees.

Technical Papers. The GPCE'03 conference invites high quality papers reporting research results and/or experience related to generative programming and component engineering. We seek papers both in software engineering and in programming languages, and especially those that bridge the gap and are accessible to both communities at the same time. The conference solicits submissions related (but not limited) to:

- Generative Programming: Reuse, meta-programming, partial evaluation, multi-stage and multi-level languages, step-wise refinement
- 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 and Domain Analysis
- Domain-specific languages (DSLs) including visual and UML-based DSLs
- Separation of Concerns: Aspect-Oriented Programming, Feature-Oriented Programming, Intentional Programming, and Multi-Dimensional Separation of Concerns
- Model-driven architecture

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. Research papers should describe work that advances the current state of the art. The program committee will evaluate each contributed paper based on its relevance, significance, clarity and originality. The program committee is happy to advise on the appropriateness of a particular subject.

Authors are invited to submit papers of at most 20 pages in LNCS proceedings format, in PDF form, by April 6, 2003. Simultaneous submission to other venues and submission of previously published material are not allowed. Electronic submission will be required, except by special arrangement with the program chairs.

Selected papers from the conference will be invited for submission to a fast-track review process in either ACM TOPLAS or ACM TOSEM as appropriate.

Practitioner Reports. GPCE '03 will feature a track geared towards industry and practice, where practitioners will present their experience and insight in applying generative and component-based technologies. We solicit reports in two categories:

- Project reports describing successfully completed projects that applied technologies within the scope of GPCE'03.
- Experience reports focussing on a particular aspect of technology usage and practice, or describe broad project experiences.

The report submissions will be reviewed separately from technical paper submissions by a practitioner report committee.

Workshops, Tutorials, Demonstrations, Posters. We invite high quality proposals in any of the above tracks related to conference topics. For details on submissions in one of these tracks, please consult the respective sites at www.gpce.org.

Young Researchers Workshop. As in the past year, the conference will feature a one day doctoral symposium, where a panel of experts will review and discuss submissions from graduate students and other young researchers. For more details about submissions, please contact the YRW Chairs Isabel John (john@iese.fhg.de) and Matthias Clauss (Matthias.Clauss@gmx.de).

Exhibits. The GPCE '03 exhibits will be held together with the exhibits of NetObjectDays'03, one of the largest main-stream software development conferences in Germany. Therefore, this will be an excellent forum to reach potential customers with news and demonstrations of your latest products, publications or services. If you would like your company to participate as an exhibitor at the conference, please refer to the web site for submission instructions.

GPCE'03 Best Contribution Awards. The GPCE'03 audience will elect the best contributions in the following categories: Best Paper, Best Practitioner Report, Best Commercial Tool, Best Non-Commercial Tool, and Best Industrial Project.

Important Dates:

Submission deadlines:	
Technical paper:	Apr 6, 2003
Workshop proposal:	Apr 6, 2003
Practitioner report:	May 18, 2003
Tutorials proposal:	May 18, 2003
Demonstration proposal:	May 18, 2003
Poster proposal:	Jul 13, 2003
Notification of acceptance:	
Technical papers:	May 25, 2003
Workshop proposals:	Apr 20, 2003
Practitioner reports:	Jun 1, 2003
Tutorials proposals:	Jun 1, 2003
Demonstration proposals:	Jun 1, 2003
Poster proposals:	Jul 27, 2003
Camera ready copy:	Jun 22, 2003

Organizing Committee

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