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Proceedings of the 2015 ACM SIGPLAN International Conference on
**Generative Programming:
Concepts and Experiences (GPCE'15)**



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Generative Programming: Concepts and Experiences (GPCE)

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Languages, Compilers, and Tools for Embedded Systems (LCTES)

Object-oriented Programming, Systems, Languages, and Applications (OOPSLA)

Onward!

Principles and Practices of Parallel Programming (PPOPP)

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Programming Language Design and Implementation (PLDI)

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GPCE'15

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Christian Kästner and Anirüddhā Gokhālē

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Message from the Chairs

Welcome to the Fourteenth International Conference on Generative Programming: Concepts & Experiences (GPCE'15). GPCE continues to provide the premiere venue for researchers and practitioners interested in techniques that use program generation, domain-specific languages, and component deployment to increase programmer productivity, improve software quality, and shorten the time-to-market of software products. In addition to exploring cutting-edge techniques of generative software, our goal is to foster further cross-fertilization between the software engineering and the programming languages research communities. This year, GPCE is co-located with OOSPLA, the premier conference on object-oriented programming, with SLE, the conference on software language engineering, and with various other events under the SPLASH umbrella. GPCE participants are invited to visit other sessions on the same day and vice versa. This provides the attendees of all events with a comprehensive overview of current research at the intersection of programming languages and software engineering.

This volume contains the papers presented at the conference as well as a short paper of the keynote presentation. GPCE'15 attracted 53 submissions (including some short research/tools papers) with authors from 20 different countries. Each submission was reviewed by at least three members of the program committee. The submissions were discussed extensively during a week-long electronic program committee meeting. As a result of this meeting, 15 full research papers and 6 short research/tools papers were selected for presentation at the conference, covering all topic areas of the call for papers, from domain-specific languages, to empirical results, and to program synthesis. The conference program also includes a short paper for the GPCE'15 keynote by Priya Narasimhan titled "Technologies to Enable the Next-Generation Stadium and Fan Experience", which will be shared with SLE'15.

Putting together GPCE'15 was a team effort. We would like to thank the authors and keynote speaker for providing the content of the program, and the program committee and external reviewers for their hard work in reviewing the papers and contributing to the program committee meeting discussions. We would also like to thank Tomofumi Yuki and Faruk Caglar for helping with publicity, the conf.researchr.org conference web management system, and the GPCE steering committee and prior chairs and various colleagues for their advice. We are grateful to SPLASH for the general organization and full support for flexible deadlines and help with local organization. Finally, we would like to thank ACM SIGPLAN for their continued support of this conference.

We hope that you will find this program inspiring and compelling, and that the conference will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.

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