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Pattern Languages of Programs (PLoP®) conference is the premier event for pattern authors and enthusiasts to gather, discuss, and learn about patterns and software development. PLoP® conferences are promoted and sponsored by The Hillside Group (www.hillside.net). The Hillside Group, through PLoP® and other activities, promotes the use of patterns and pattern languages to record, analyze, and improve software and its development, and supports any new practices that help achieve these goals.

Preliminary versions of these papers were workshopped at Pattern Languages of Programs (PLoP) '15 October 24-26, 2015, Pittsburgh, Pennsylvania, USA.
Welcome to PLoP 2015

The Pattern Languages of Programs (PLoP™) conference is the premier event for pattern authors and enthusiasts to gather, discuss, and learn more about patterns, programming, software development, and more!

This year PLoP was co-located with the SPLASH conference, in Pittsburgh, Pennsylvania. The conference is not traditional — the main event is a set of Writers' Workshops where pattern papers are reviewed by fellow authors, led by expert workshop leaders.

All the participants had lots of opportunities to learn about patterns, pattern languages, pattern writing, and the quest for human-centered software creation in the panoply of PLoP activities: Writers' Workshops, Focus Groups, BoF sessions, BootCamp, Games, shared meals and chit-chat.

The Writers' Workshops are the primary focus of our time at PLoP and they allow authors to discuss and review each other's papers in a very fruitful way. We had five groups of five to seven papers each, which were selected from an initial set of 41 submissions after a considerable period of shepherding. One of these papers was selected for a writing group and had the opportunity of being evolved during PLoP with the mentoring of an experienced pattern writer.

Very exciting this year was our invited talks. Mary Lynn Manns has shared with us her experience on "Keeping A Pattern Language Alive", and Mary Shaw made us think about our "Progress Toward an Engineering Discipline of Software".

There were seven afternoon focus groups in total, where participants were active exploring ideas and learning from peer discussions, as well as 'Birds of a Feather' (BoF) sessions that let participants informally organize discussions about topics that they are interested in, as well as joint dinner opportunities.

And last but not least, we have the Games, a well-established and very important activity at PLoP. Guided by Christian Kohls, the games help us to break the ice, exercise our body and mind, collaborate better, and reinforce a community of trust. Some of the games have become 'traditions', while others will be a surprise.

After the conference, the authors were strongly encouraged to further evolve their papers in order to accommodate suggestions for improvement gathered during the discussions at the conference. A final version of evolved papers will be published in the ACM Digital Library as PLoP 2015 Proceedings.

We would like to thank all authors, shepherds, reviewers, and members of the Program Committee for their time and collaboration. Thank you all for making PLoP 2015 possible!

Filipe F. Correia, PLoP 2015 Chair
Pattern Languages of Programs (PLoP) conference is the premier event for pattern authors and enthusiasts to gather, discuss, and learn more about patterns and software development. Preliminary versions of these papers were work-shopped at Pattern Languages of Programs (PLoP) '15 October 24-26, 2015, Pittsburgh, PA. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission. Copyright is held by the authors.

PLoP 2015 Conference Description

Pattern Languages of Programs (PLoP) conference is a venue for pattern authors to have their pattern languages reviewed by fellow authors. The purpose of PLoP is to promote the development of pattern languages, primarily about aspects of software: design and programming, testing, software architecture, user interface design, domain modeling, education, human relations, and software processes. Patterns and pattern languages for domains outside software are also welcome.

PLoP 2015 was held in Pittsburgh, Pennsylvania from October 24-26, 2015. We invited contributions from practitioners and researchers on the following:

- Patterns and pattern languages
- Critiques of patterns and pattern languages
- Research on patterns and pattern languages
- Case studies of the use of patterns and pattern languages

PLoP is different from other conferences. It is run as a "writers' workshop," as described in Richard Gabriel's book, Writers' Workshops and the Work of Making Things. Before the conference, authors interact with a shepherd who helps them improve their paper to prepare it for PLoP. After shepherding, the program committee reviews the papers for final acceptance. The writers' workshops provide more feedback, and authors revise their papers again after PLoP. The papers here are these final, revised versions, not the ones reviewed at PLoP.
Writers’ workshops help the pattern community to improve their patterns and pattern languages. These workshops are the primary focus at PLoP, and in them we discuss accepted papers. Below is the list of papers that were workshopped at PLoP 2015 and included in these proceedings.

**Steelers Group – Pattern Writing**
- led by Richard Gabriel
  - “Two-level Checklists and Perspectives: Software Reading Techniques for Pattern Writer’s Workshop” by Tian Xia, Hironori Washizaki, Yoshiaki Fukazawa, Joseph Yoder, Rebecca Wirfs-Brock
  - “Guiding Patterns of Naturally Occurring Design: Mining Living Quality” by Jessie Henshaw
  - “Undiscovered Patterns” by David Wess, Jane Quillien
  - “What’s the PREMES behind your Pattern?” by Jan de Muijnck-Hughes, Ishbel M.M. Duncan
  - “Pattern Illustrating Patterns: A Pattern Language for Pattern Illustrating” by Natsumi Miyazaki, Rika Sakuraba, Kaori Harasawa, Takashi Iba
  - “Fundamental Behavioral Properties – Part 2: Extending the Theory of Centers for Pattern Language 3.0” by Yuji Harashima, Tomoki Kaneko, Taichi Isaku, Takashi Iba
  - “The Method of Agile Pattern Creation for Campus Building: The Keio-SFC Experiment” by Takashi Iba, Noriko Kimura, Takuya Honda, Sumire Nakamura, Sakurako Kogure, Ayaka Yoshikawa

**Riverhounds Group – Software Architecture & Process**
- led by Michael John
  - “Relating Patterns and Reference Architectures” by Eduardo Guerra, Elisa Yumi Nakagawa
  - “Patterns to Develop and Evolve Architecture During an Agile Software Project” by Rebecca Wirfs-Brock, Joseph Yoder, Eduardo Guerra
  - “Logical Layering Heuristic” by Wiebe Wiersema, Leo Pruijt

**led by Michael John**
led by Hironori Washizaki

led by Christian Kohls
led by Mary Lynn Manns
Program Committee

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