SugarLoafPLoP® 2018

Huaso Edition

Conference Proceedings

12th LATIN-AMERICAN CONFERENCE ON PATTERN LANGUAGES OF PROGRAMS

November 20th – 23rd, 2018, Valparaíso, Chile

Proceedings

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Pattern Languages of Programs (PLoP®) conference is a premier event for pattern authors and pattern enthusiasts to gather, discuss, and learn more about patterns and software development. PLoP® conferences are primarily 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.

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Welcome to SugarLoafPLoP 2018

SugarLoafPLoP 2018, **the 12th Latin-American Conference on Pattern Languages of Programs** brought together researchers, educators, and practitioners whose interests span a remarkably broad range of topics and who share an interest in exploring the power of the pattern form.

This edition of SugarLoafPLoP was held for the first time in Valparaiso, Chile, incorporating several Spanish- and Portuguese-speaking participants from Latin-America, along with participants from USA, Germany, and Portugal.

This year's program included two main tracks: the traditional Writers' Workshops, where authors had the opportunity to refine and extend their patterns with the help from knowledgeable and empathetic fellow pattern enthusiasts.

SugarLoafPLoP was held at the main campus of the Universidad Tecnica Federico Santa Maria in Valparaiso, Chile.

These proceedings are the result of the work of authors, shepherds, reviewers, and conference participants. 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.

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 SugarLoafPLoP 2018 possible!!

We are glad to have added your expertise to the growing corpus of patterns!

Eduardo B. Fernandez (Florida Atlantic University, USA), Hernán Astudillo (UTFSM, Chile), SugarLoafPLoP 2018 Program Co-Chairs

SugarLoafPLoP® 2018 Conference Proceedings

Pattern Languages of Programs (PLoP®) Conference Series has been organized since 1994 as a premier event for researchers, educators, and professionals to share, learn, and explore the potential of patterns and pattern languages.

SugarLoafPLoP 2018 Conference Description

Pattern Languages of Programs (PLoP) conference is a place for pattern authors to have their pattern languages reviewed by fellow authors. The purpose of PLoP is to promote development of pattern languages, primarily about aspects of software, including design and programming, software architecture, user interface design, domain modeling, and software process. SugarLoafPLoP is the PLoP conference of the Latin-American community.

SugarLoafPLoP 2018 was held in Valparaíso, Chile, November 20th-23rd, 2018.

We invited contributions from practitioners and researchers on:

- Pattern Papers – short papers containing one or more patterns; or longer papers containing pattern languages.
- Papers on Applying Patterns – regular papers that explore the use and application of patterns, such as using patterns in industry and academia, tools for using patterns, evaluation of productivity when using patterns, teaching and consulting with patterns, and so on.

PLoP is different from other conferences. It is run in the "writers' workshop" style, 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 SugarLoafPLoP. Papers received another round of revisions to guarantee the quality of the resulting papers here published. The papers here are these final, revised versions, not the ones reviewed at SugarLoafPLoP.

Pre-conference Workshops

This edition of SugarLoafPLoP had a bootcamp and some agile-related workshops prior to the conference. The bootcamp was a training and mentoring experience where participants were immersed in patterns and emerged with an enlarged perspective, their first pattern, and an ability to get more out of the SugarLoafPLoP conference. The following is a list of the workshops presented prior to SugarLoafPLoP.

Agile Software Design Techniques by Eduardo Guerra

Scrum Patterns by Joseph Yoder and Ademar Aguiar

Being Agile at Quality: Values, Practices, and Patterns by Joseph Yoder

Invited Talks

At the SugarLoafPLoP '2018 conference, all participants enjoyed keynotes from thought leaders of the patterns community.

Following is the list of invited talks.

Abstract security patterns for requirements specification and analysis of secure systems by Eduardo B. Fernandez

Bringing Liveness to Design Patterns: a way, a roadmap, a trail, a point by Ademar Aguiar

Being Agile About Architecture: Values, Practices, and Patterns by Joseph Yoder

Visualizing and assessing trade-offs among patterns by Hernán Astudillo

Patterns for adopting software analytics in small and medium size agile teams by Eduardo Guerra

SugarLoafPLoP 2018 Writers' Workshops

Writers' workshops help the pattern community to improve their patterns and pattern languages. These workshops are the primary focus at PLoP conferences, and in them we discuss accepted papers. Below is the list of papers that were work-shopped at SugarLoafPLoP 2018 and included in these proceedings.

Writers' Workshop led by Eduardo Fernandez

"Two threat patterns that exploit 'Cloud Based Leaky Buckets' and 'Malware Laden Buckets'" by Rohini Sulatycki and Eduardo B. Fernandez

"A Security Information and Event Management Pattern"
by Manfred Vielberth and Günther Pernul

" A Pattern for Controlled Access to a Cargo Port Terminal Physical Structure"
by Virginia Mendiola Romero and Eduardo B. Fernandez

"A security pattern for Zone Isolation using Virtual Processors in mobile and embedded systems" by Eduardo B. Fernandez and Jorge Forneron

"The Remote Laboratory Management System (RLMS) Pattern"
by Luis Felipe Zapata Rivera and Maria M. Larrondo Petrie

"A Security Pattern for Cloud service certification"
by Antonio Muñoz and Javier López

"Patterns of Store-oriented Software Ecosystems: Detection, Classification, and Analysis of Design Options" by Bahareh Jazayeri, Olaf Zimmermann, Jochen Küster, Gregor Engels, Dennis Kundisch, and Daniel Szopinski

Writers' Workshop led by Hernán Astudillo

"APEP - An Architectural Pattern Evaluation Process"
by Andreas Seitz, Felix Thiele, and Bernd Bruegge

"Learning from Experiments, Define Quality Standards, Suspend Measurement: Three patterns in a Software Analytics Pattern Language"
by Joelma Choma, Eduardo Martins Guerra, and Tiago Silva da Silva

"Patterns to Support a Continuous Experimentation Process"
by Alexandre Bittencourt Faria, Danilo Alves De Jesus, Fernando Pereira, Joelma Choma, Luis Ricardo Arantes Filho, Vanessa Gomes Albuquerque, and Eduardo M. Guerra

"Quality Delivery Pipeline" by Joseph W. Yoder, Hironori Washizaki, and Ademar Aguiar

"Trade-offs evaluation in pattern-based product migration: A Chilean case study"
by Pablo Cruz and Hernán Astudillo

"Swarming Patterns" by Joseph W. Yoder, Danijel Arsenovski, and Ademar Aguiar

Committees

The SugarLoafPLoP Conference would not be a success without the volunteer help of the shepherds and program committee members. The shepherds devote hours of their time to helping authors improve their papers pre-conference. The program committee members help organize the conference, handle requests, and communicate with attendees. We would like to thank all those who helped make SugarLoafPLoP 2018 a complete success.

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