



IWST 2024: International Workshop on Smalltalk Technologies

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Abstract

The *International Workshop on Smalltalk Technologies (IWST)* is traditionally organized within the *European Smalltalk User Group (ESUG)* conference. Its goal is to create a forum around contributions and experiences on building or using technologies related to Smalltalk and its derivatives. IWST welcomes papers on any aspect of Smalltalk, from the theoretical as well as practical perspective, including research and industrial papers. IWST 2024 has received 14 submissions that passed through a 2-round reviewing process. Authors of all submissions have been invited to present their work as a factor in the evaluation process. Finally, 10 papers were accepted for publication in the IWST 2024 Proceedings.

Keywords

EUSG: European Smalltalk User Group, IWST: International Workshop on Smalltalk Technologies

IWST 2024: International Workshop on Smalltalk Technologies, Lille, France; July 8th-11th, 2024

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1. Preface

This volume contains papers presented at IWST 2024, the International Workshop on Smalltalk Technologies, which was held in Lille, France, from July 8th to 11th, 2024.

IWST 2024 continues the tradition of a successful series of events co-located with the European Smalltalk User Group (ESUG) conferences focused on contributions and experiences in building and using Smalltalk Technologies. It aims to gather developers and users of Smalltalk-related technologies around the presentation, discussion, and dissemination of the latest scientific and practical achievements in research or industry. The workshop welcomes position papers, papers describing work in progress, tool demonstration papers, technical and industrial reports, and papers designed to provoke debate and inspire future collaborations and contributions.

The IWST 2024 workshop consisted of five technical sessions split into two days with contributions reviewed and selected by an international program committee. IWST 2024 has received 14 submissions that have been presented as a part of the contribution evaluation process. Evaluation has further been done based on the opinion of at least three reviewers in a 2-round reviewing process. After the second review round, 10 papers were accepted for publication in the IWST 2024 Proceedings.

Evaluation has been conducted according to several criteria. Among these criteria, we included three award criteria: quality and significance of the scientific contribution, the significance of the contribution to the ESUG community, and the significance and innovativeness of the emerging idea. After all, in each category, the three best contributions received an award (Section 2.1) and a symbolic prize sponsored by *Lam Research Corporation*.

We are grateful to all PC members (Section 3.2) for submitting careful and timely opinions on the papers. Our special thanks are also addressed to the ESUG board for co-locating and co-organizing IWST with the ESUG conference, while we thank the INRIA Lille, France for hosting and organizing both events. Finally, a special thanks goes to the Lam Research Corporation for sponsoring the best paper awards.

2. Workshop Program

The workshop accepted 8 full papers and 2 short papers. Papers were awarded based on three criteria selected by reviewers: best paper, best community contribution, and best emerging idea.

2.1. Awarded papers

We congratulate to winners of the first, second, and third prizes in all three categories:

I Best paper

- (1) Modest-Pharo: Unit Test Generation for Pharo Based on Traces and Metamodels by *Gabriel Darbord, Fabio Vandewaeter, Anne Etien, Nicolas Anquetil, and Benoit Verhaeghe*,
- (2) Modular and Extensible Extract Method by *Balša Šarenac, Stéphane Ducasse, Guillermo Polito, and Gordana Rakić*, and
- (3) MethodProxies A Safe and Fast Message-Passing Control Library by *Sebastian Jordan Montaña, Juan Pablo Sandoval Alcocer, Guillermo Polito, Stéphane Ducasse, and Pablo Tesone*.

II Best contribution to the ESUG community

- (1) Pyramidion a framework for domain-specific editors by *Yann Le Goff, Pierre Laborde, Alain Plantec, and Éric Le Pors*,
- (2) Redesigning FFI calls in Pharo: exploiting the baseline JIT for more performance and low maintenance by *Juan Ignacio Bianchi and Guillermo Polito*, and
- (3) Runtime type collecting and transpilation to a static language by *Richard Uttner and Pavel Krivanek*.

III Best emerging idea

- (1) SoSAF: A Pharo-Based Framework for Enhancing System-Of-Systems Dependencies Analysis by *Mouhamadou Falilou Ball, Patrick Auger, Jannik Laval, and Loïc Lagadec*,

- (2) Phausto: fast and accessible DSP programming for sound and music creation in Pharo by *Domenico Cipriani*, and
- (3) A Graphical Language Server on the Smalltalk Platform by *Graham McLeod and Gareth Coxby*.

3. Workshop organization

The papers have been reviewed by an international Program Committee (PC) and selected by PC chairs.

3.1. Program chairs

Steven Costiou, Inria Lille, France,
Guillermo Polito, Inria Lille, France, and
Gordana Rakić, University of Novi Sad, Serbia

3.2. Program committee

Vincent Blondeau, Lifeware, Switzerland,
Santiago Bragagnolo, Lifeware, Switzerland,
Renzo Degiovanni, LIST, Luxembourg,
Eric Lepors, Thales DMS, France,
Matteo Marra, Nokia Bell Labs, Belgium
Dave Mason, Ryerson University, Toronto, Canada,
Ana-Maria Oprescu, University of Amsterdam, Neatherlands,
Jean Privat, University of Quebec in Montreal, Canada,
Larisa Safina, Inria Lille, France,
Ronie Salgado, Universidad de Chile, Chile
Joao Saraiva, University of Minho, Portugal,
Imen Sayar, Inria Lille, France,
Melinda Tóth, Eotvos Lorand University, Hungary *Vincent Verbeque*, ENSTA Bretagne, France
Benoît Verhaeghe, Berger-Levrault, Lyon, France, and
Oleksandr Zaytsev, Cirad, UMR SENS, France

3.3. Sponsoring

ESUG: European Smalltalk User Group (organisation), and
Lam Research Corporation (awards)