

IWST 2013

Program of the 5th edition of
the International Workshop on Smalltalk Technologies

In conjunction with the
21th International Smalltalk Joint Conference

Anancy, september 2013



Introduction

A Bit of history

IWST 2013 Is the Fifth edition of the workshop. The former editions were:

- 2009: Brest
- 2010: Barcelona
- 2011: Edinburgh
- 2012: Ghent

This edition received the support of ACM SIGPLAN.



Introduction

Goals and scopes

- The goal of the workshop is to create a forum around advances or experience in Smalltalk and to trigger discussions and exchanges of ideas. Participants are invited to submit research articles. Two kinds of papers are accepted:
 - Short position papers describing emerging ideas.
 - Long research papers with deeper description of experiments and of research results.
- IWST welcomes contributions on all aspects, theoretical as well as practical, of Smalltalk related topics such as:
 - Aspect-oriented programming,
 - Design patterns,
 - Experience reports,
 - Frameworks,
 - Implementation,
 - new dialects or languages implemented in Smalltalk,
 - Interaction with other languages,
 - Meta-programming and Meta-modeling,
 - Tools

Organization

Program Chairs

- [Loïc Lagadec](#) *Lab-STICC, ENSTA Bretagne, France*
- [Alain Plantec](#), *Lab-STICC, UBO, France*

Program Comittee

- **Etien Anne** *LIFL, Université de Lille 1, France*
- **Gabriela Arevalo** *Universidad Nacional de Quilmes, Argentina*
- **Alexandre Bergel** *Universitadde Chile, Chile*
- **Johan Fabry** *Ecole des Mines de Douai, France*
- **Tudor Girba** *CompuGroup Medical Schweiz, Switzerland*
- **Mickaël Kerboeuf** *LabSticc, Iniversité de Bretagne Occidentale, France*
- **Mariano M. Peck** *Ecoledes Mines de Douai, France*
- **Jorge Ressa** *SCG, University of Bern, Switzerland*
- **Bastian Steinert** *HPI, Software Architecture Group, Germany*
- **Hervé Verjus** *Université de Savoie, France*
- **Erwan Wernli** *SCG, University of Bern, Switzerland*
- **Hernan Wilkinson** *10Pines, Buenos Aires, Argentina*

Schedule

Session 1: **Tuesday, september 10**

Room 101, 1:30pm-2:45pm

- 1:30 pm: **Opening**
- 1:35pm-1:55pm: ***Virtual Smalltalk Images: Model and Applications***
Guillermo Polito, Stéphane Ducasse, Luc Fabresse and Noury Bouraqadi
- 2:00pm-2:20pm: **Identifying Equivalent Objects to Reduce Memory Consumption**
Alejandro Infante, Juan Pablo Sandoval Alcocer and Alexandre Bergel
- 2:25pm-2:45pm: ***Towards a flexible Pharo Compiler***
Clement Bera and Marcus Denker

Schedule

Session 2: **Tuesday, september 10**

Room 101, 3:15pm-4:40pm

- 3:15pm-3:35pm: ***Language-side Foreign Function Interfaces with NativeBoost***
Camillo Bruni, Luc Fabresse, Stéphane Ducasse and Igor Stasenko
- 3:40pm-4:00pm: **Early exploring design alternatives of smart sensor software with Model of Computation implemented with actors** Jean-Philippe Schneider, Zoé Drey and Jean-Christophe Le Lann
- 4:05pm-4:25pm: **Representing Code History with Development Environment Events**
Martín Dias, Damien Cassou and Stéphane Ducasse
- 4:30pm: **Discussion: IWST in the future?**
Closing

Notes

- **Pragmatic Visualizations for Roassal: a Florilegium**

Mathieu Dehouck, Stéphane Ducasse, Usman Bhatti and Alexandre Bergel

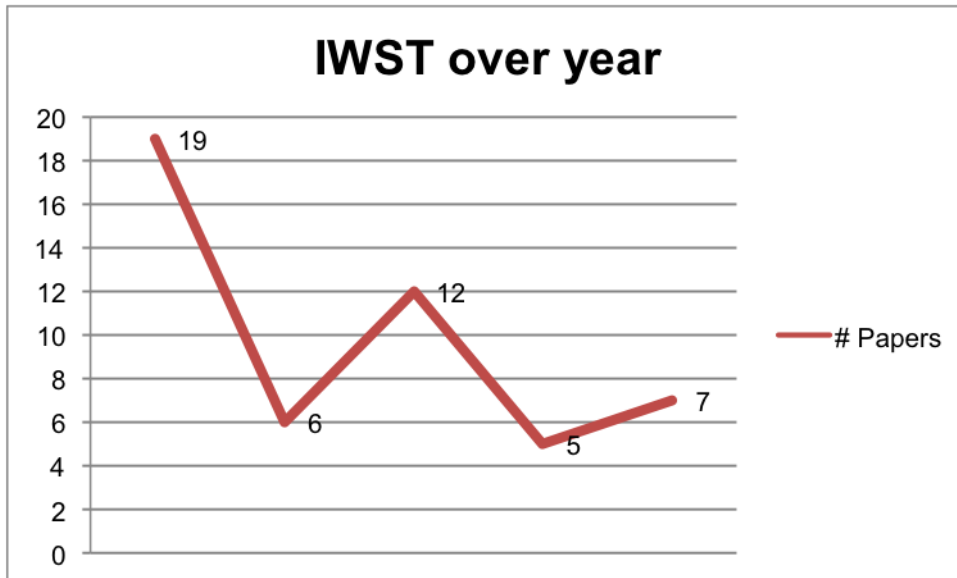
- The paper won't be presented but appears in the proceeding. We invite you to assist to the talk by Alexandre Bergel tomorrow on the same technical contribution.

Discussion

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- 2013: Annecy



Position

- **IWST is a nice place to submit a paper for PhDs**
Learn dy doing ;)
- **IWST is a nice place to start reviewing papers and enter PC**
Learn dy doing ;)
- **IWST is a nice place to submit a paper for researchers**
Journal Special issues

IWST has a lot to offer to our community but:

IWST is fragile : we must take care of it

IWST receives **too few submissions**

IWST receives submissions from **too few teams**

IWST is **time consuming** for organizers

it's up to all of us to contribute and make IWST durable

Discussion (1)

- **About the number of submissions:**
 - Quality is good but audience is small
 - Too few research teams doing Smalltalk (need for a cartography, visibility through the website, ...)
 - Too few research teams play the game (flag known teams with no submission)
 - Publishing Smalltalk is hard compared to Java : IWST is important but we should be careful regarding the “already published” issue
- **About the audience**
 - in the past: try to go to Dynamic languages but it failed
 - Revise the call to make IWST more visible

Discussion (2)

- **About the contributors**
 - Involve more people from the industry
 - Directly contact people
 - Involve more PhD in the process (PC, ...)
- **About the scope**
 - IWST is a testbed for publication in a A/A+ conference
 - IWST offers a fast feed back from the community
- **Journal issues bring dual effects:**
 - Motivate authors, with more submissions to journals than to IWST
 - Some authors focus on journal hence do not submit to IWST
 - Finalize a set of potential reviewers is important

APPENDIX

Speaker's bio

- Guillermo Polito will present “Virtual Smalltalk images: Model and Applications”.
- Guillermo Polito is a Phd student from Argentina, whose thesis topic is reflective system manipulation. He is doing his Phd in Mines de Douai, in collaboration with Inria.

Speaker's bio

- Alejandro Infante will present “Identifying Equivalent Objects to Reduce Memory Consumption”.
- Alejandro Infante is a Computer Engineering undergraduate student at Universidad de Chile, since March 2010. He has been working on Pharo since January 2013, and currently he is participating at ESUG summer of code in the "Gadget Profiler" project. Also He has been doing some research on profiling with his mentors, Juan Pablo Sandoval and Alexandre Bergel.

Speaker's bio

- Marcus Denker will present “Towards a Pharo flexible compiler”.
- Marcus Denker is a permanent researcher (CR1, with tenure) at INRIA Lille - Nord Europe. Before, he was a postdoc at the PLEIAD lab/DCC University of Chile and the Software Composition Group, University of Bern. His research focuses on reflection and meta-programming for dynamic languages. He is an active participant in the Squeak and Pharo open source communities for many years. Marcus Denker received a PhD in Computer Science from the University of Bern/Switzerland in 2008 and a Dipl.-Inform. (MSc) from the University of Karlsruhe/Germany in 2004. He is a member of ACM, GI, and IEEE and a board-member of ESUG.

Speaker's bio

- Igor Stasenko will present “*Language-side Foreign Function Interfaces with NativeBoost*”.
- Igor Staenko is an research engineer at Rmod team and works on developing and improving the Pharo project. His research interests focus on dynamic languages, and more specifically Smalltalk he discovered in 2006 – despite he started computing at 14 -, and VM. He is one of the main contributors of NativeBoost.

Speaker's bio

- Jean-Philippe Schneider will present “Early exploring design alternatives of smart sensor software with Model of Computation implemented with actors”.
- Jean-Philippe is a PhD student at the ENSTA Bretagne in Brest. He's working on models of computation based simulation of smart sensors network. Prior to his PhD, and after he graduated from a french engineering school in 2010, he worked until 2012 as a research engineer on a european project of sea floor observatory in Brest.

Speaker's bio

- Martín Dias will present “Representing Code History with Development Environment Events”.
- Currently Martín Dias is doing a PhD at Inria-Lille, where he enjoys working in Pharo. In the past he worked for several years in companies mostly in Java desktop applications. He was introduced to the world of Smalltalk while studying Computer Sciences at Universidad de Buenos Aires.

Speaker's bio

- Alexandre Bergel will present “Pragmatic Visualizations for Roassal: a Florilegium”.
- Alexandre Bergel is Professor at the University of Chile. He is working in the area of software profiling and software visualization.