3rd IEEE Working Conference on Software Visualization – VISSOFT 2015

It is an honor and a pleasure to present the proceedings of the 3rd IEEE Working Conference on Software Visualization. VISSOFT is the premier conference on software visualization and related theory and practices in software comprehension. VISSOFT 2015 has taken place in Bremen, Germany. This conference is the third in line after the recent merger of the ACM Symposium on Software Visualization and the IEEE International Workshop on Visualizing Software for Understanding and Analysis (VISSOFT). VISSOFT 2015 focuses specifically on visualization techniques that draw on aspects of software maintenance, software evolution, program comprehension, reverse engineering and reengineering. As was the case for the first edition of VISSOFT, we are co-located with the 31th International Conference on Software Maintenance and Evolution (ICSME).

VISSOFT 2015 is the result of a long effort undertaken by many people. The organizing committee includes Juergen Doellner (General Chair), Fabian Beck and Alexandre Bergel (Program Co-Chairs), Alexandre Bergel and Anne Etien (Artifact Evaluation), Craig Anslow and Johan Fabry (NIER & Tool Track Co-Chairs), Juraj Kubelka (Web chair). In total, 55 reviewers (excluding the chairs) have participated in selecting submissions and producing high-quality reviews.

Every conference depends on the quality of the research it presents. We would like to thank all the authors who submitted their work to VISSOFT 2015. We would like to pay tribute to members of the PC for the care and time they put into producing reviewers of high quality, and doing so in a timely manner.

Tudor Gîrba kindly accepted to be our keynote speaker. His talk is titled *Pervasive software visualizations* and argues why IDE has to change radically by making visualization as first class citizens. Doru, as Tudor likes to be called, obtained his PhD in 2005 from the University of Bern, and now works as a consultant and coach. He leads the work on the Moose platform for software and data analysis. In 2014, he won the prestigious Dahl-Nygaard Junior Prize for his work on modeling and visualization of evolution and interplay of large numbers of objects.

VISSOFT 2015 is different than previous years as it now features an Artifact Evaluation, a best paper award, a response period for technical papers, and a special journal issue. The award has been sponsored by Object Profile\(^1\). Object Profile interest is in software visualization and the company welcomed our effort. It is becoming common to have a response period which offers opportunities for authors to answer questions or spot issues in the reviewers evaluation. A response period helps by improving the quality of the reviews, and it increases the interaction between authors and the reviewers. All but four papers had an author response. This year, a selection of the best papers will be invited to submit an extended version for a special section of Information and Software Technology (IST) published by Elsevier.

\(^1\)http://objectprofile.com
The main track of VISSOFT 2015 received 28 submissions from 62 authors, from which 12 papers have been accepted. In total, 187 reviews have been produced. The NIER (New Ideas and Emerging Results) and Tools paper track received 30 submissions from 103 authors. Similar to for the main research track, each paper was reviewed by at least 3 reviewers. As a result, 9 NIER papers and 9 tool demos have been accepted for presentation.

We are very grateful to the VISSOFT steering committee, in particular Alexandru Telea, Stephan Diehl, and Rainer Koschke, for helping us on some important organizational decisions. We sincerely thank the DCC/University of Chile for hosting our website and Sabine, from HPI, for her support in organizing different aspects of the conference.

VISSOFT’15 was chaired by:

- Fabian Beck (University of Stuttgart, Germany, http://research.fbeck.com)
- Alexandre Bergel (PLEIAD Lab, Department of Computer Science (DCC), University of Chile, Chile, http://bergel.eu)
- Jürgen Döllner (Computer Graphics Systems, Hasso-Plattner-Institut, Germany, https://hpi.de/de/computer-graphics-systems)

Program Committee Members - Technical Track

- Craig Anslow (Middlesex University)
- Wim De Pauw (Google Inc.)
- Stephan Diehl (University Trier)
- Johan Fabry (University of Chile)
- Tudor Gîrba (University of Bern)
- Carsten Görg (University of Colorado School of Medicine)
- Michele Lanza (University of Lugano)
- Claus Lewerentz (Brandenburgische Technische Universität Cottbus)
- Jonathan Maletic (Kent State University)
- Chris Muelder (U. C. Davis)
- Emerson Murphy-Hill (North Carolina State University)
- James Noble (Victoria University of Wellington)
- Steven Reiss (Brown University)
- Sébastien Rufiange (EISTI)
• Houari Sahraoui (Université De Montréal)
• Bonita Sharif (Youngstown State University)
• Margaret-Anne Storey (University of Victoria)
• Alexandru Telea (University of Groningen)
• Andy Zaidman (TU Delft)
• External reviewers: Stuart Marshall, Michael Burch, Andreas Kerren, Ricardo Terra, Jennifer Baldwin, Michael Homer

Program Committee Members - NIER & Tool Track

• Bilal Alsallakh (TU Vienna)
• Ivan Beschastnikh (University of British Columbia)
• Jennifer Baldwin (Swinburne University)
• Usman Bhatti (INRIA Lille / Synectique)
• Michael Burch (University of Stuttgart)
• Andrei Chis (University of Bern)
• Neville Churcher (University of Canterbury)
• Marcus Denker (INRIA Lille)
• Coen De Roover (Vrije Universiteit Brussel)
• Jens Dietrich (Massey University)
• Bogdan Dit (Boise State University)
• Maria-Elena Froese (University of Victoria)
• Mathias Frisch (MID GmbH)
• Michael Homer (Victoria University of Wellington)
• James A. Jones (University of California)
• Jannik Laval (Ecole Des Mines de Douai)
• Paul Leger (Universidad Catolica Del Norte)
• Andrea Mocci (Unviersity of Lugano)
• Tim Molderez (Vrije Universiteit Brussel)
• Chris Parnin (North Carolina State University)
• Michael Perscheid (HPI-Universitat Potsdam)
• David Roethlisberger (Universidad Diego Portales)
• Christian Tominski (University of Rostock)
• External reviewers: Jan Kurs, Leonel Merino, Haidar Osman, Thierry Renaux, Daniel Rozenberg, Quentin Stivenart, Liang Zhou

VISSOFT Steering Committee

• Stephan Diehl (University of Trier)
• Carsten Görg (University of Colorado)
• Christopher Hundhausen (Washington State University)
• Rainer Koschke (University of Bremen)
• Michele Lanza (University of Lugano)
• Jonathan Maletic (Kent State University)
• Steven P. Reiss (Brown University)
• Margaret-Anne Storey (University of Victoria)
• Alexandru C. Telea (University of Groningen)
• Houari Sahraoui (University of Montreal)