

Table of Contents

Message from the Chairs	<i>vi</i>
Organizers	<i>vii</i>
Committees	<i>viii</i>

Processes, Frameworks, and Architectures

Requirements of Software Visualization Tools: A Literature Survey	2
<i>Holger M. Kienle, Hausi A. Müller</i>	
Software Visualization - A Process Perspective	10
<i>Juergen Rilling, Wen Jun Meng, Fuzhi Chen, Philippe Charland</i>	
Design Guidelines for Ambient Software Visualization in the Workplace	18
<i>Chris Parnin, Carsten Görg</i>	
Visualizing Object Oriented Software: Towards a Point of Reference for Developing Tools for Industry	26
<i>Mariam Sensalire, Patrick Ogao</i>	

Dynamic Behavior and Features

Visualizing Dynamic Memory Allocations	31
<i>Sergio Moreta, Alexandru Telea</i>	
Visualization of Dynamic Program Aspects	39
<i>Pieter Deelen, Frank van Ham, Cornelis Huizing, Huub van de Wetering</i>	
Trace Visualization Using Hierarchical Edge Bundles and Massive Sequence Views	47
<i>Danny Holten, Bas Cornelissen, Jarke J. van Wijk</i>	
Distributable Features View: Visualizing the Structural Characteristics of Distributed Software Systems	55
<i>Dan C. Cosma, Radu Marinescu</i>	

Facilitating Exploration of Unfamiliar Source Code by Providing 2½D Visualizations of Dynamic Call Graphs	63
<i>Johannes Bohnet, Jürgen Döllner</i>	

Rapid Prototyping of Visualizations using Mondrian	67
<i>Adrian Lienhard, Adrian Kuhn, Orla Greevy</i>	

Metaphors and Comprehension

CocoViz: Towards Cognitive Software Visualizations.....	72
<i>Sandro Boccuzzo, Harald Gall</i>	

Onion Graphs for Focus+Context Views of UML Class Diagrams	80
<i>Huzefa Kagdi, Jonathan I. Maletic</i>	

Visualization Patterns: A Context-Sensitive Tool to Evaluate Visualization Techniques	88
<i>Harkirat Padda, Ahmed Seffah, Sudhir Mudur</i>	

Visualizing Software Systems as Cities	92
<i>Richard Wettel, Michele Lanza</i>	

Task-specific Source Code Dependency Investigation	100
<i>Reid Holmes, Robert J. Walker</i>	

Software Visualization in the Context of Service-Oriented Architectures.....	108
<i>Stefan Eicker, Thorsten Spies, Christian Kahl</i>	

Evolutionary Aspects

"A Bug's Life" Visualizing a Bug Database	113
<i>Marco D'Ambros, Michele Lanza, Martin Pinzger</i>	

DiffArchViz: A Tool to Visualize Correspondence between Multiple Representations of a Software Architecture	121
<i>Amit Sawant, Naveen Bali</i>	

YARN: Animating Software Evolution	129
<i>Abram Hindle, Zhen Ming Jiang, Walid Koneilat, Michael W. Godfrey, Richard C. Holt</i>	

A Visualization for Software Project Awareness and Evolution	137
<i>Roger M. Ripley, Anita Sarma, André van der Hoek</i>	

Evolutional Insights from UML and Source Code Versions using Information Visualization and Visual Analysis	145
<i>Shawn A. Bohner, Denis Gračanin, Troy Henry, Kresimir Matković</i>	

Tool Demonstration Summaries

Feature-centric Visualization	150
<i>David Röthlisberger, Orla Greevy, Adrian Lienhard</i>	

Effective Exploration and Visualization of Large Execution Traces	152
<i>Abdelwahab Hamou-Lhadj</i>	
SoftArchViz: A Software Architecture Visualization Tool	154
<i>Amit P. Sawant, Naveen Bali</i>	
Visualizing Debugging Activity in Source Code Repositories	156
<i>Lucian Voinea, Alexandru Telea</i>	
 Tool Challenge Summaries	
Dependencies Analysis of Azureus with Rigi: Tool Demo Challenge	159
<i>Holger M. Kienle, Hausi A. Müller, Johannes Martin</i>	
CGA Call Graph Analyzer - Locating and Understanding Functionality within the Gnu Compiler Collection's Million Lines of Code	161
<i>Johannes Bohnet, Jüergen Döellner</i>	
Analysis of Azureus using VERSO	163
<i>Guillaume Langelier, Karim Dhambri</i>	
 Author Index	 165
 Color Plates	 166