

2008 Frontiers of Software Maintenance

**Beijing, China
28 September - 4 October 2008**



IEEE Catalog Number:
ISBN 13:

CFP0830E-PRT
978-1-4244-2654-6

Table of Contents

Service-Oriented Architecture and its Implications for Software Maintenance and Evolution	1
<i>Grace A. Lewis, Dennis B. Smith</i>	
Challenges and Opportunities Related to the Design, Deployment and, Operation of Web Services	11
<i>Kostas Kontogiannis</i>	
Traceability Management for Impact Analysis	21
<i>Andrea De Lucia, Fausto Fasano, Rocco Oliveto</i>	
Expressiveness and Effectiveness of Program Comprehension: Thoughts on Future Research Directions	31
<i>Jonathan I. Maletic, Huzeifa Kagdi</i>	
Frontiers of Reverse Engineering: A Conceptual Model	38
<i>Gerardo Canfora, Massimiliano Di Penta</i>	
The Road Ahead for Mining Software Repositories	48
<i>Ahmed E. Hassan</i>	
Program Slicing	58
<i>Keith Gallagher, David Binkley</i>	
Dealing with Crosscutting Concerns in Existing Software	68
<i>Leon Moonen</i>	
Frontiers of Web Site Evolution	78
<i>Shihong Huang</i>	
Component-Based Tool Development	87
<i>Holger M. Kienle</i>	
Retesting Software During Development and Maintenance	99
<i>Mary Jean Harrold, Alessandro Orso</i>	
Software Analysis for Security	109
<i>Spiros Mancoridis</i>	
Frontiers of Software Clone Management	119
<i>Rainer Koschke</i>	
The Past, Present, and Future of Software Evolution	129
<i>Michael W. Godfrey, Daniel M. German</i>	
Remixing Visualization to Support Collaboration in Software Maintenance	139
<i>Margaret-Anne Storey, Chris Bennett, R. Ian Bull, Daniel M. German</i>	
Systems of Systems: New Challenges for Maintenance and Evolution	149
<i>Dennis B. Smith, Grace A. Lewis</i>	