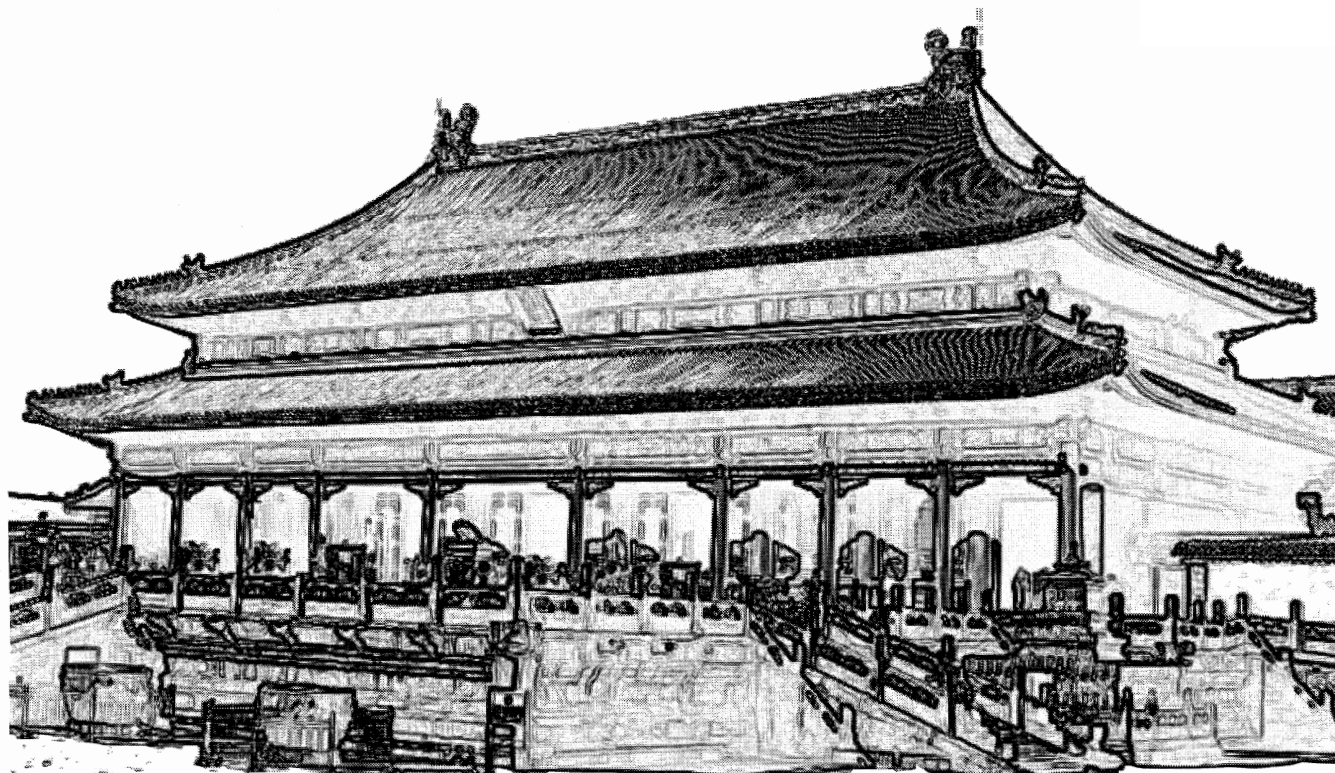


P R O C E E D I N G S
Tenth IEEE International Symposium on

WEB SITE EVOLUTION

October 3–4, 2008 • Beijing, China

WSE 2008



Sponsored by

In cooperation with

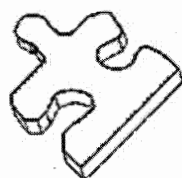


Table of Contents

WSE 2008 Organization	vii
Keynote & Invited Talks	
• Requirement Engineering for Web Applications	1
Li Zhang (<i>Beihang University</i>)	
• Dynamic Model Extraction and Statistical Analysis of Web Applications: Follow-up after 6 years	3
Paolo Tonella (<i>FBK-IRST</i>), Filippo Ricca (<i>Unità CINI at DISI</i>)	
• Ten Years of Web Site Evolution	11
Scott Tilley (<i>Florida Institute of Technology</i>)	
Session 1: Web Services	
• COB2WEB A Toolset for migrating to Web Services	19
Harry M. Sneed (<i>University of Regensburg</i>)	
• Transforming a Java Application in an Equivalent Web-Services Based Application: Toward a Tool Supported Stepwise Approach	27
Alessandro Marchetto (<i>Fondazione Bruno Kessler - IRST</i>), Filippo Ricca (<i>Unità CINI at DISI</i>)	
• Mining Candidate Web Services from Legacy Code	37
Lerina Aversano, Luigi Cerulo, Ciro Palumbo (<i>University of Sannio</i>)	
• A Model Driven Approach Toward Business Process Test Case Generation	41
Qiulu Yuan, Ji Wu, Chao Liu, Li Zhang (<i>Beihang University</i>)	
Session 2: Re-engineering	
• Consistent Web Site Updating Based on Bidirectional Transformation	45
Keisuke Nakano (<i>The University of Electro-Communications</i>), Zhenjiang Hu (<i>National Institute of Informatics</i>), Masato Takeichi (<i>University of Tokyo</i>)	
• Using Semantic Clustering to Enhance the Navigation Structure of Web Sites	55
Giuseppe Scanniello (<i>University of Basilicata</i>), Damiano Distanto (<i>Tel.M.A. University</i>), Michele Risi (<i>University of Salerno</i>)	
• A Seamless and Reliable Distributed Network File System Utilizing Webspace	65
Hsiang-Ching Chao, Tzong-Jye Liu, Kuong-Ho Chen, Chyi-Ren Dow (<i>Feng Chia University</i>)	
• Web-based System Evolution in Model Driven Architecture	69
Feng Chen, Hongji Yang, Hong Zhou, Bing Qiao (<i>De Montfort University</i>), Huifang Deng (<i>South China University of Technology</i>)	
Session 3: Web Evolution	
• Evolution of Legal Statements on the Web	73
Holger M. Kienle (<i>University of Victoria</i>), Crina A. Vasiliu (<i>University of Victoria MBA Alumni</i>)	
• Research Challenges in Management and Compliance of Policies on the Web	83
Holger M. Kienle, Hausi A. Müller (<i>University of Victoria</i>)	
• A Comparative Study of Maintainability of Web Applications on J2EE, .NET and Ruby on Rails	93
Lok Fang Fang Stella, Stan Jarzabek, Bimlesh Wadhwa (<i>National University of Singapore</i>)	

Session 5: Analysis and Visualization

- **Reverse Engineering of Web Applications to Abstract User-Centered Conceptual Models**..... 101
Mario Luca Bernardi, Giuseppe Antonio Di Lucca (*University of Sannio*),
Damiano Distante (*TEL.M.A. University*)
 - **An Approach for Estimating Code Changes in E-Commerce Applications** 111
Brian Chan, Lionel Marks, Ying Zou (*Queen's University*)
 - **Usability Analysis and Visualization of Web 2.0 Applications**..... 121
Ludger Martin (*Johannes Gutenberg University Mainz*)
- Author Index** 125