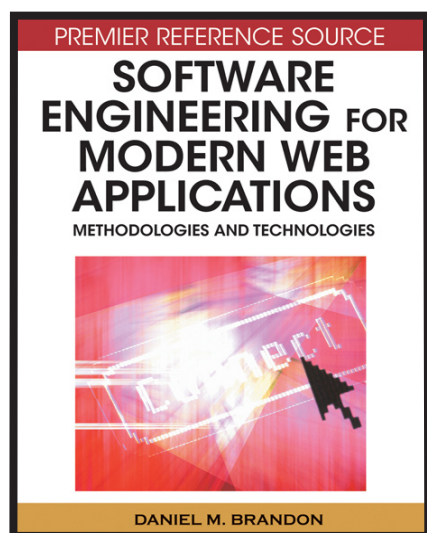


New Release

June 2008

# Software Engineering for Modern Web Applications: Methodologies and Technologies



**Edited by: Daniel M. Brandon, Christian Brothers University, USA**

13-digit ISBN: 978-1-59904-492-7

402 pages; 2008 Copyright

Price: US \$180.00 (hardcover\*)

Pre-pub price<sup>§</sup>: US \$165.00

Online Access only<sup>\*\*</sup>: US \$132.00

Illustrations: figures, tables (8 1/2" x 11")

Translation Rights: World

\*Paperback is not available. <sup>§</sup>Pre-pub price is good through one month after publication. <sup>\*\*</sup>Online access is for libraries and is good for the life of the edition.

**“This book addresses differences between web software engineering and traditional software engineering platforms, and introduces and discusses methodologies and technologies for successful application development in the web environment.”**

**- Daniel M. Brandon, Christian Brothers University, USA**

As modern organizations migrate from older information architectures to new Web-based systems, the discipline of software engineering is changing both in terms of technologies and methodologies. There is a need to examine this new frontier from both a theoretical and pragmatic perspective, and offer not only a survey of new technologies and methodologies but discussions of the applicability and pros/cons of each.

**Software Engineering for Modern Web Applications: Methodologies and Technologies** presents current, effective software engineering methods for the design and development of modern Web-based applications, offering scholars, researchers, and practitioners innovative research on the theoretical frameworks, structures, management, and implications software engineering for modern Web applications.

## Subject:

Software/Systems Engineering, Programming, Analysis and Design; Internet and Web Technologies and Services; Mobile Computing and Communications Technologies; Human, Behavioral, and Social Aspects of Technology; Artificial Intelligence; Information Security, Privacy, and Ethics

## Market:

This essential publication is for all academic and research libraries, as well as all those looking for the latest research on Web engineering. Software engineers and IT professionals required to stay current on modern Web applications, will find this publication invaluable. Researchers, practitioners, educators, managers, and students in a full range of IT-related fields will also benefit.



Excellent addition to your library! Recommend to your acquisitions librarian.

[www.info-sci-ref.com](http://www.info-sci-ref.com)

# Software Engineering for Modern Web Applications: Methodologies and Technologies

Edited by: Daniel M. Brandon, Christian Brothers University, USA

## Table of Contents

### Chapter I: Web Engineering: Introduction and Perspectives

*S. Murugesan, Southern Cross University, Australia*

*A. Ginige, University of Western Sydney, Australia*

### Chapter II: Augmented WebHelix: A Practical Process for Web Engineering

*Nary Subramanian, University of Texas at Tyler, USA*

*George Whitson, University of Texas at Tyler, USA*

### Chapter III: Model-centric Architecting Process

*Tony C Shan, IBM, USA*

*Winnie W Hua, CTS Inc., USA*

### Chapter IV: Architecture, Specification, and Design of Service-Oriented Systems

*J. Kral, Charles University, Czech Republic*

*M. Zemlicka, Charles University, Czech Republic*

### Chapter V: Data Integration through Service-based Mediation for Web-enabled Information Systems

*Claus Pahl, Dublin City University, Ireland*

*Yaoling Zhu, Dublin City University, Ireland*

### Chapter VI: Using Patterns for Engineering High-Quality Web Applications

*Pankaj Kamthan, Concordia University, Canada*

### Chapter VII: Component-based Deployment for Web Applications

*Kevin Gary, Arizona State University, USA*

*Harry Koehnemman, Arizona State University, USA*

### Chapter VIII: Evolving Web Application Architectures, from Model 2 to Web 2

*David Parsons, Massey University, New Zealand*

### Chapter IX: Applying Agility to Database Design

*Linda Sherrell, University of Memphis, USA*

*Guoqing Wei, FedEx Corporation, USA*

### Chapter X: Automatic Creation of GUI's for Web Based Systems

*Jorge Marx Gómez, Universität Oldenburg, Germany*

*Daniel Lübke, Leibniz Universität Hannover, Germany*

### Chapter XI: Prototyping in Web Development

*Clif Kussmaul, Muhlenberg College, USA*

*Roger Jack, Elegance Technologies, Inc., USA*

### Chapter XII: Testing Methods for Web Applications

*David L. Mills, University of Memphis, USA*

### Chapter XIII: Outsourcing Issues in Web Development

*Clif Kussmaul, Muhlenberg College, USA*

*Roger Jack, Elegance Technologies, Inc., USA*

### Chapter XIV: Engineering Wireless Mobile Applications

*Q. H. Mahmoud, University of Guelph, Canada*

*Z. Maamar, Zayed University, United Arab Emirates*

### Chapter XV: Project Management and Web Software Engineering

*Dan Brandon, Christian Brothers University, USA*

### Chapter XVI: Comprehensive Web Application Development Bibliography

*Margaret Menzin, Simmons College, USA*

## About the Editors:

**Daniel M. Brandon** is currently a Professor of Information Technology Management (ITM) at Christian Brothers University (CBU) in Memphis, TN. His research interests include both the management and technical side of IT. At CBU he teaches undergraduate and graduate courses in IT, including Information Systems Management, Project Management, Software Engineering, Database Design, Decision Support Systems, Internet Systems, and Programming. His most recent book (2006) is Project Management for Modern Information Systems by IRM Press (978-1591406945). He has been published in a number of other books, journals, and conference proceedings including The Project Management Journal, The Wiley Guide to Managing Projects, Essentials of Project Control, Encyclopedia of Information Technology, and the Journal of Computing Sciences in Colleges. He is a member of the Society of Information Management (SIM), the Information Resource Management Association (IRMA), the IEEE Computer Society, and the Project Management Institute (PMI). He also holds the PMP (Project Management Professional) Certification which is the highest certification granted from PMI. He continues to do consulting with a number of companies both locally and internationally. Currently he is involved in the design and development of comprehensive open source software systems for business applications.

**Excellent addition to your library! Recommend to your acquisitions librarian.**

[www.info-sci-ref.com](http://www.info-sci-ref.com)