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## Adaptive Web Services for Modular and Reusable Software Development: Tactics and Solutions

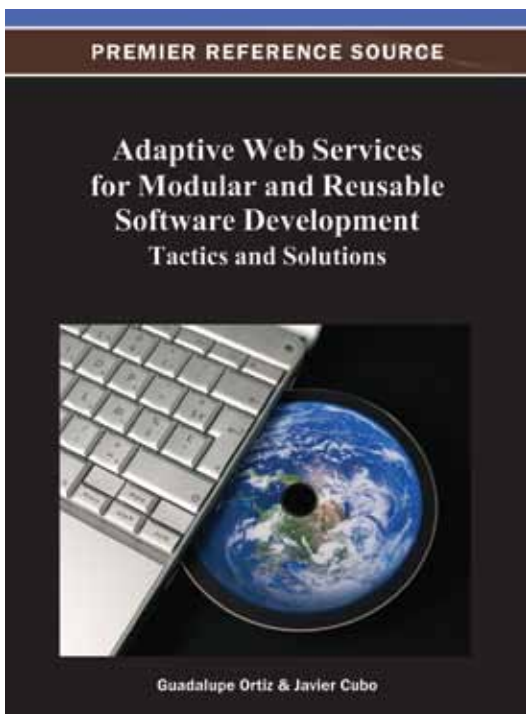
Guadalupe Ortiz (University of Cádiz, Spain)  
and Javier Cubo (University of Málaga, Spain)

Web services provide systems with great flexibility and easier maintenance which result in better ways to communicate and distribute applications. There are good procedures in place for the design, development, and management of Web services; however, there are areas in which Web service adaptation is required. To preserve the loosely coupled approach of Web services, service adaptations should be implemented appropriately.

**Adaptive Web Services for Modular and Reusable Software Development: Tactics and Solutions** includes current research on the area of Web service adaptation while embarking upon the different aspects related to Web services. This collection provides an overview of existing solutions for service adaptation in different development scopes as well as covers a wide variety of challenges which emerge. It aims to keep industry professionals as well as academic researchers up to date with the latest research results.

### Topics Covered:

- Adaptation for Composition
- Adaptive ESB Infrastructure
- Context Adaptation
- Device Adaptation
- Service Bases Systems
- Service-Oriented Systems
- User Preferences Adaptation
- Web Services



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**Guadalupe Ortiz** completed her PhD in Computer Science at the University of Extremadura (Spain) in 2007. Since graduating in 2001, she worked as an Assistant Professor as well as a research engineer at the University of Extremadura's Computer Science Department for the following eight years. In 2009, she joined the University of Cádiz as Professor in the Department of Computer Science. She has published numerous peer-reviewed papers in international journals, workshops and conferences. She has been a member of various programme and organization committees of scientific workshops and conferences over the last years, and acts as a reviewer for several journals. Her research interests embrace aspect-oriented techniques as a way to improve Web service development in various fields, with an emphasis on model-driven extra-functional properties and quality of service, as well as service context-awareness and their adaptation to mobile devices.



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## Section 1: Contract-Based Adaptation and Interoperability

### Chapter 1

#### *Adaptive ESB Infrastructure for Service Based Systems*

González Laura (Instituto de Computación, Facultad de Ingeniería, Universidad de la República, Uruguay)

Ruggia Raúl (Instituto de Computación, Facultad de Ingeniería, Universidad de la República, Uruguay)

### Chapter 2

#### *Structural Interoperability as a Basis for Service Adaptability*

Delgado José C. (Instituto Superior Técnico, Technical University of Lisbon, Portugal)

### Chapter 3

#### *Service Discovery and Composition Based on Contracts and Choreographic Descriptions*

Bravetti Mario (University of Bologna, Italy & INRIA, France)

Zavattaro Gianluigi (University of Bologna, Italy & INRIA, France)

## Section 2: Context-Aware Adaptation

### Chapter 4

#### *Reusing Services through Context-Aware Discovery and Adaptation in Pervasive Systems*

Cubo Javier (University of Málaga, Spain)

Pimentel Ernesto (University of Málaga, Spain)

### Chapter 5

#### *Towards Event-Driven Context-Aware Web Services I*

Ortiz Guadalupe (Quercus Software Engineering Group, Spain & UCASE Software Engineering Group, Spain)

Boubeta-Puig Juan (UCASE Software Engineering Group, Spain)

García de Prado Alfonso (UCASE Software Engineering Group, Spain)

Medina-Bulo Inmaculada (UCASE Software Engineering Group, Spain)

## Section 3: Adaptation for Composition

### Chapter 6

#### *Service-Oriented Systems for Adaptive Management of Service Composition*

Cardellini Valeria (University of Roma "Tor Vergata," Italy)

Di Valerio Valerio (University of Roma "Tor Vergata," Italy)

Iannucci Stefano (University of Roma "Tor Vergata," Italy)

Lo Presti Francesco (University of Roma "Tor Vergata," Italy)

### Chapter 7

#### *Mining Lifecycle Event Logs for Enhancing Service-based Applications*

Dustdar Shahram (Vienna University of Technology, Austria)

Leitner Philipp (Vienna University of Technology, Austria)

Nardini Franco Maria (ISTI-CNR, Pisa, Italy)

Silvestri Fabrizio (ISTI-CNR, Pisa, Italy)

Tolomei Gabriele (ISTI-CNR, Pisa, Italy)

### Chapter 8

#### *From SOA to Pervasive Service Ecosystems:*

Viroli Mirko (Università di Bologna, Italy)

Zambonelli Franco (Università di Modena e Reggio Emilia, Italy)

Stevenson Graeme (University of St Andrews, UK)

Dobson Simon (University of St Andrews, UK)

## Section 4: Dynamic Adaptation

### Chapter 9

#### *Flexible Coordination Techniques for Dynamic Cloud Service Collaboration*

Creaner Gary (Dublin City University, Ireland)

Pahl Claus (Dublin City University, Ireland)

### Chapter 10

#### *A Framework for Situation-Aware Adaptation of Service-Based Applications*

Patinotiakis Ioannis (National Technical University of Athens, Greece)

Papageorgiou Nikos (National Technical University of Athens, Greece)

Verginadis Yiannis (National Technical University of Athens, Greece)

Apostolou Dimitris (National Technical University of Athens, Greece)

Mentzas Gregoris (National Technical University of Athens, Greece)

### Chapter 11

#### *F-DR-ARE:*

Tariq Fahad Bin (University of Paderborn, Germany)

Korrapati Sandeep (University of Paderborn, Germany)

## Section 5: Device-Based Future Internet Adaptation

### Chapter 12

#### *Addressing Device-Based Adaptation of Services:*

Achilleos Achilles P. (University of Cyprus, Cyprus)

Yang Kun (University of Essex, UK)

Papadopoulos George A. (University of Cyprus, Cyprus)

### Chapter 13

#### *A Service-Based Approach to Connect Context-Aware Platforms and Adaptable Android for Mobile Users*

Monfort Valérie (SOIE, Tunisia)

Cherif Sihem (SOIE, Tunisia)

Chaabani Rym (ISIG, Tunisia)

### Chapter 14

#### *Adaptive Future Internet Applications:*

Marquezan Clarissa Cassales (The Ruhr Institute for Software Technology, Paluno, University of Duisburg-Essen, Germany)

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