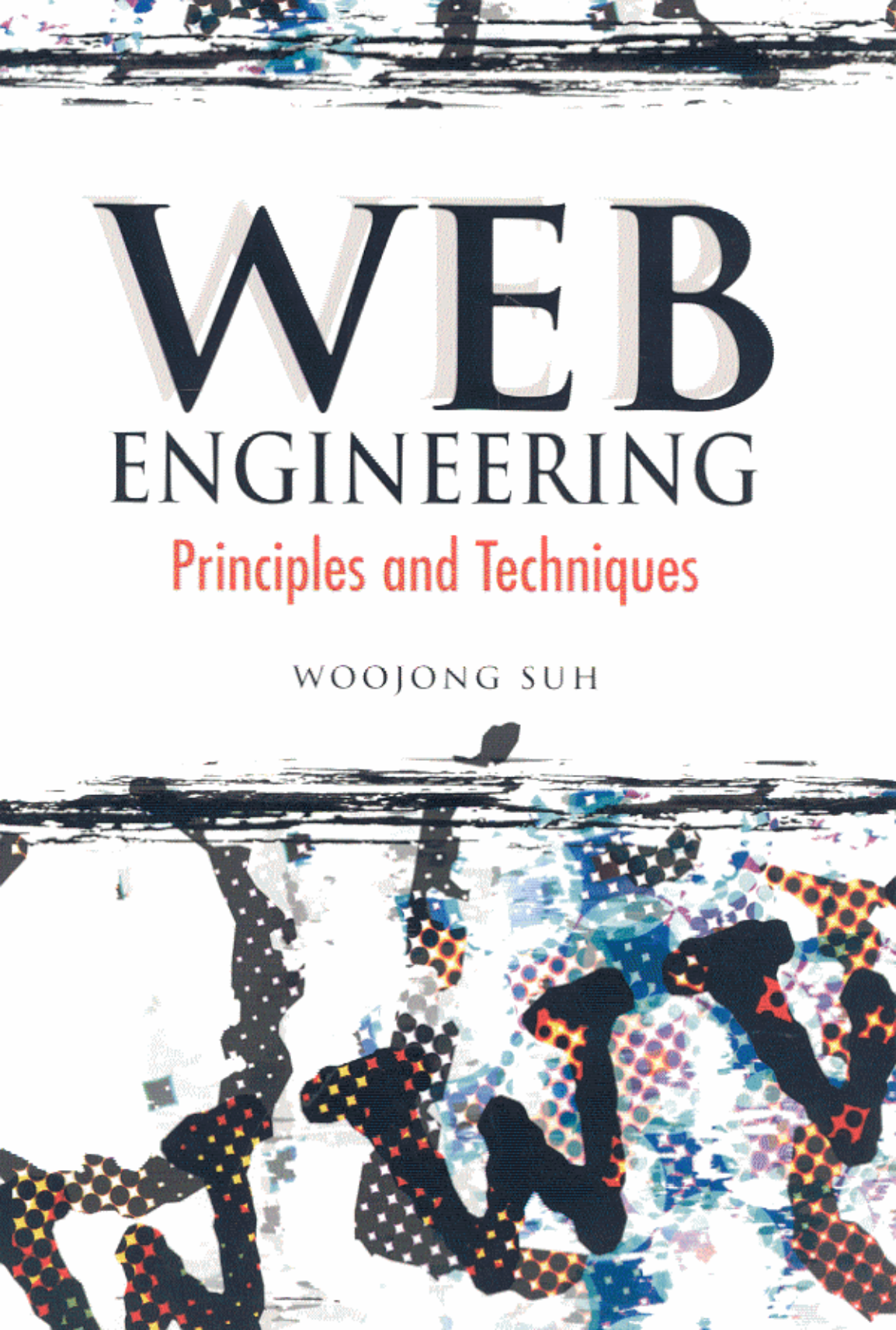


The background of the cover is a complex, abstract composition. It features a white base with various colorful patterns, including polka dots in blue, red, and yellow, and larger, more intricate designs in blue and black. A prominent black silhouette of a person is visible in the lower right quadrant, appearing to be in a dynamic pose. The overall aesthetic is modern and artistic.

WEB ENGINEERING

Principles and Techniques

WOOJONG SUH

Web Engineering: Principles and Techniques

Table of Contents

Preface	vi
----------------------	-----------

SECTION I: WEB ENGINEERING: CONCEPTS AND REFERENCE MODEL

Chapter I.

Web Engineering: Introduction and Perspectives	1
---	----------

San Murugesan, Southern Cross University, Australia

Athula Ginige, University of Western Sydney, Australia

Chapter II.

Web Engineering Resources Portal (WEP): A Reference Model and Guide	31
--	-----------

Sotiris P. Christodoulou, University of Patras, Greece

Theodore S. Papatheodorou, University of Patras, Greece

SECTION II: WEB APPLICATION DEVELOPMENT: METHODOLOGIES AND TECHNIQUES

Chapter III.

Web Application Development Methodologies	76
--	-----------

Jim Q. Chen, St. Cloud State University, USA

Richard D. Heath, St. Cloud State University, USA

Chapter IV.

Relationship Analysis: A Technique to Enhance Systems Analysis for Web	
---	--

Development	97
--------------------------	-----------

Joseph Catanio, LaSalle University, USA

Michael Bieber, New Jersey Institute of Technology, USA

Chapter V.

Engineering Location-Based Services in the Web 114

Silvia Gordillo, LIFIA, UNLP, Argentina

Javier Bazzocco, LIFIA, UNLP, Argentina

Gustavo Rossi, LIFIA, UNLP, Argentina, and Conicet, Argentina

Robert Laurini, LIRIS, INSA-LYON, France

SECTION III: WEB METRICS AND QUALITY: MODELS AND METHODS

Chapter VI.

Architectural Metrics for E-Commerce: A Balance between Rigor and Relevance 132

Jinwoo Kim, Yonsei University, Korea

Chapter VII.

The eQual Approach to the Assessment of E-Commerce Quality: A Longitudinal Study of Internet Bookstores 161

Stuart J. Barnes, Victoria University of Wellington, New Zealand

Richard Vidgen, University of Bath, UK

Chapter VIII.

Web Cost Estimation: An Introduction 182

Emilia Mendes, University of Auckland, New Zealand

Nile Mosley, MetriQ (NZ) Limited, New Zealand

SECTION IV: WEB RESOURCE MANAGEMENT: MODELS AND TECHNIQUES

Chapter IX.

Ontology-Supported Web Content Management 203

Geun-Sik Jo, Inha University, Korea

Jason J. Jung, Inha University, Korea

Chapter X.

Design Principles and Applications of XRM 224

Jae Kyu Lee, Korea Advanced Institute of Science and Technology, Korea

Mye M. Sohn, Sungkyunkwan University, Korea

SECTION V: WEB MAINTENANCE AND EVOLUTION: TECHNIQUES AND METHODOLOGIES

Chapter XI.

Program Transformations for Web Application Restructuring 242

Filippo Ricca, ITC-irst, Italy

Paolo Tonella, ITC-irst, Italy

Chapter XII.

The Requirements of Methodologies for Developing Web Applications	261
<i>Craig Standing, Edith Cowan University, Australia</i>	

Chapter XIII.

A Customer Analysis-Based Methodology for Improving Web Business Systems	281
<i>Choongseok Lee, Samsung SDS Co., Korea</i>	
<i>Woojong Suh, Inha University, Korea</i>	
<i>Heeseok Lee, Korea Advanced Institute of Science and Technology, Korea</i>	

SECTION VI: WEB INTELLIGENCE: TECHNIQUES AND APPLICATIONS

Chapter XIV.

Analysis and Customization of Web-Based Electronic Catalogs	309
<i>Benjamin P.-C. Yen, The University of Hong Kong, China</i>	

Chapter XV.

Data Mining Using Qualitative Information on the Web	332
<i>Taeho Hong, Pusan National University, Korea</i>	
<i>Woojong Suh, Inha University, Korea</i>	

About the Authors	353
--------------------------------	------------

Index	360
--------------------	------------