# Table of Contents

Preface .................................................................................................................................................. xix

Section 1  
**Socially Intelligent Learning Support: Recent Trends**

**Chapter 1**  
Modeling Social Influences in a Knowledge Management Network ....................................................... 1  
*Giacomo Franco, IBM Italia, Italy  
Paolo Maresca, Università di Napoli, Italy  
Giancarlo Nota, Università degli Studi di Salerno, Italy*

**Chapter 2**  
Adapting SCORM Compliant LOs in a Knowledge Engineering Scenario .............................................. 17  
*Pierpaolo Di Bitonto, University of Bari, Italy*

**Chapter 3**  
Ontologies in Intelligent Learning Systems .......................................................................................... 31  
*Boryana Deliyska, University of Forestry – Sofia, Bulgaria  
Peter Manoilov, Technical University of Sofia, Bulgaria*

**Chapter 4**  
EduTutor: An Intelligent Tutor System for a Learning Management System ....................................... 49  
*Joel J. P. C. Rodrigues, University of Beira Interior, Portugal  
Pedro F. N. João, University of Beira Interior, Portugal  
Binod Vaidya, University of Beira Interior, Portugal*

**Chapter 5**  
The Preliminary Investigation of the Factors that Influence the E-Learning Adoption in Higher  
Education Institutes: Jordan Case Study ............................................................................................ 64  
*Maen Al-hawari, University of Ballarat, Australia  
Sanaa Al-halabi, Al-Ahliyya Amman University, Jordan*
Section 2
Adaptive and Game-Based Learning: New Models

Chapter 6
An Adaptive Course Generation Framework
Frederick W. B. Li, Durham University, UK
Rynson W. H. Lau, City University of Hong Kong, China
Parthiban Dharmendran, Durham University, UK

Chapter 7
Integrating Individual Differences in Adaptive Educational Systems: The Unified Learning Style Model Case
Elvira Popescu, University of Craiova, Romania

Chapter 8
Ontology-Based Multimedia Authoring Tool for Adaptive E-Learning
Lawrence Y. Deng, St. John's University, USA
Huan-Chao Keh, Tamkang University, Taiwan
Yi-Jen Liu, Tamkang University, Taiwan

Chapter 9
Enhancing Adaptive Learning and Assessment in Virtual Learning Environments with Educational Games
Ángel del Blanco, Universidad Complutense de Madrid, Spain
Javier Torrente, Universidad Complutense de Madrid, Spain
Pablo Moreno-Ger, Universidad Complutense de Madrid, Spain
Baltasar Fernández-Manjón, Universidad Complutense de Madrid, Spain

Chapter 10
An Educational Game Helping Learners to Distinguish Similar Chinese Characters while Minimizing Human Efforts in Game Content Creation
Zhi-Hui Hu, City University of Hong Kong, Hong Kong, University of Science & Technology of China, China, & CityU-USTC Joint Advanced Research Centre, China
Billy H.W. Chiu, City University of Hong Kong, Hong Kong
Howard Leung, City University of Hong Kong, Hong Kong, & CityU-USTC Joint Advanced Research Centre, China
Yun Xu, University of Science & Technology of China, China & CityU-USTC Joint Advanced Research Centre, China
Chapter 11
Development of Adaptive Kanji Learning System for Mobile Phone

Mengmeng Li, University of Tokushima, Japan
Hiroaki Ogata, University of Tokushima, Japan
Bin Hou, University of Tokushima, Japan
Satoshi Hashimoto, University of Tokushima, Japan
Yuqin Liu, Dalian University of Technology, China
Noriko Uosaki, University of Tokushima, Japan
Yoneo Yano, University of Tokushima, Japan

Section 3
Learning as a Service: Emerging Technologies

Chapter 12
Mashup of E-Learning Services: Emerging Technologies and Practices

Neil Y. Yen, Waseda University, Japan
Timothy K. Shih, National Central University, Taiwan
Qun Jin, Waseda University, Japan
Hui-Huang Hsu, Tamkang University, Taiwan
Louis R. Chao, Tamkang University, Taiwan

Chapter 13
Building Integrated E-Learning Environment Using Cloud Services and Social Networking Sites

Mohammed Al-Zoube, Princess Sumaya University for Technology, Jordan
Mudasser F. Wyne, National University, USA

Chapter 14
Revealing Student Blogging Activities Using RSS Feeds and LMS Logs

Michael Derntl, University of Vienna, Austria

Chapter 15
Large-Scale Server-Side Infrastructure for E-Learning: Development, Design, and Experience

Neil Simpkins, Open University, UK

Section 4
Technology-Enhanced Learning: Innovative Applications

Chapter 16
Coping with Accessibility and Usability Challenges of Online Technologies by Blind Students in Higher Education

Samuel Mwamungu, University of North Texas, USA
Lin Lin, University of North Texas, USA
Chapter 17
The ART (Activities, Resources, Technological Supports) in On-Site and Online Learning, and Students’ Perceptions of Acquisition of Thinking and Team-Building Skills
Jennifer D. E. Thomas, Pace University, USA
Danielle Morin, Concordia University, Canada

Chapter 18
A Research of Applying Learning Diagnosis Diagram in Online Learning Diagnosis
Yu Lung Wu, National Tai Chung University of Education, Taiwan

Chapter 19
Web-Based Two-Tier Diagnostic Test and Remedial Learning Experiment
Ah-Fur Lai, Taipei Municipal University of Education, Taiwan
Deng-Jyi Chen, National Chiao Tung University, Taiwan

Chapter 20
E-Learning in Engineering Education: Design of a Collaborative Advanced Remote Access Laboratory
A.P. Jagadeesh Chandra, S.J College of Engineering, India
R.D. Sudhaker Samuel, S.J College of Engineering, India

Compilation of References

About the Contributors

Index