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Advanced Computational Methods in Life System Modeling and Simulation

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Preface

This book constitutes the proceedings of the 2017 International Conference on Life System Modeling and Simulation (LSMS 2017) and the 2017 International Conference on Intelligent Computing for Sustainable Energy and Environment (ICSEE 2017), which were held during September 22–24, in Nanjing, China. These two international conference series aim to bring together international researchers and practitioners in the fields of advanced methods for life system modeling and simulation as well as advanced intelligent computing theory and methodologies and engineering applications for sustainable energy and environment. The two conferences held this year were built on the success of previous LSMS and ICSEE conferences held in Shanghai and Wuxi, respectively. The success of the LSMS and ICSEE conference series were also based on several large-scale RCUK/NSFC funded UK–China collaborative projects on sustainable energy and environment, as well as a recent government funded project on the establishment of the UK-China University Consortium in Engineering Education and Research, with an initial focus on sustainable energy and intelligent manufacturing.

At LSMS 2017 and ICSEE 2017, technical exchanges within the research community took the form of keynote speeches, panel discussions, as well as oral and poster presentations. In particular, two workshops, namely, the Workshop on Smart Grid and Electric Vehicles and the Workshop on Communication and Control for Distributed Networked Systems, were held in parallel with LSMS 2017 and ICSEE 2017, focusing on the two recent hot topics on green and sustainable energy systems and electric vehicles and distributed networked systems for the Internet of Things.

The LSMS 2017 and ICSEE 2017 conferences received over 625 submissions from 14 countries and regions. All papers went through a rigorous peer review procedure and each paper received at least three review reports. Based on the review reports, the Program Committee finally selected 208 high-quality papers for presentation at LSMS 2017 and ICSEE 2017. These papers cover 22 topics, and are included in three volumes of CCIS proceedings published by Springer. This volume of CCIS includes 59 papers covering 7 relevant topics.

Located at the heartland of the wealthy lower Yangtze River region in China and being the capital of several dynasties, kingdoms, and republican governments dating back to the 3rd century, Nanjing has long been a major center of culture, education, research, politics, economy, transport networks, and tourism. In addition to academic exchanges, participants were treated to a series of social events, including receptions and networking sessions, which served to build new connections, foster friendships, and forge collaborations. The organizers of LSMS 2017 and ICSEE 2017 would like to acknowledge the enormous contribution of the Advisory Committee, who provided guidance and advice, the Program Committee and the numerous referees for their efforts in reviewing and soliciting the papers, and the Publication Committee for their editorial work. We would also like to thank the editorial team from Springer for their support and guidance. Particular thanks are of course due to all the authors, as

without their high-quality submissions and presentations the conferences would not have been successful.

Finally, we would like to express our gratitude to our sponsors and organizers, listed on the following pages.

September 2017

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