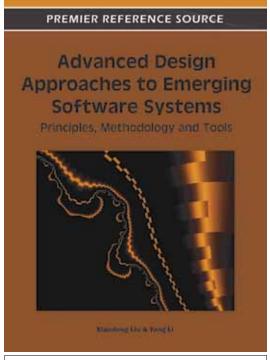
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# Advanced Design Approaches to Emerging Software Systems: Principles, Methodologies and Tools



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Recently, rapid and fundamental advances in computing technologies have been driving the role and scope of software systems to a new level. A number of new types of software systems are emerging, among which service based systems, cloud computing, pervasive computing, and Internet of Things are eminent examples. These systems have imposed new challenges on their design, development, testing and maintenance, and are demanding for new appropriate approaches and tools.

Advanced Design Approaches to Emerging Software Systems: Principles, Methodology and Tools provides relevant theoretical frameworks and the latest empirical research findings in the area. This book will help to clarify the present chaotic and confusing literature of the current state of the art and knowledge in the areas of the design and engineering of the many emerging software systems. This book also facilitates the exchange and evolution of software engineering advances among multiple disciplines, research, industry, and user communities.

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- Pervasive Computing Systems
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Xiaodong Liu received his PhD in Computer Science from De Montfort University, UK. He is a reader and the director of Centre for Information & Software Systems, in the School of Computing, Edinburgh Napier University, UK. As an active researcher, his current research focuses on Context-aware adaptive services, service evolution, mobile clouds, pervasive computing, software reuse, and component-based software engineering. Dr. Liu has led 6 externally funded projects, and published over 50 papers in established international journals and conferences and 2 book chapters. He is the inventor of 1 patent registered in UK, USA and at International Level. He has been the chair, co-chair or PC member of a number of IEEE and IASTED international conferences. He is the editorial board member of 3 international journals and editor of 2 research books. He is a member of IEEE Computer Society and British Computer Society.



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