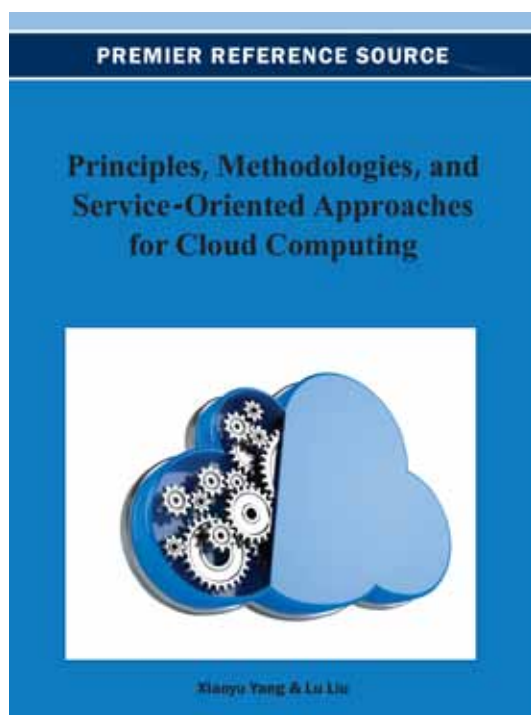


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## Principles, Methodologies, and Service-Oriented Approaches for Cloud Computing



Xiaoyu Yang (University of Reading, UK) and  
Lu Liu (University of Derby, UK)

Innovations in cloud and service-oriented architectures continue to attract attention by offering interesting opportunities for research in scientific communities. Although advancements such as computational power, storage, networking, and infrastructure have aided in making major progress in the implementation and realization of cloud-based systems, there are still significant concerns that need to be taken into account.

**Principles, Methodologies, and Service-Oriented Approaches for Cloud Computing** aims to present insight into Cloud principles, examine associated methods and technologies, and investigate the use of service-oriented computing technologies. In addressing supporting infrastructure of the Cloud, including associated challenges and pressing issues, this reference source aims to present researchers, engineers, and IT professionals with various approaches in Cloud computing.

### Topics Covered:

- Cloud Computing and SOA Overview
- Cloud Storage
- Open Federated Cloud Computing
- QoS-oriented Service Computing
- Security and Privacy in Cloud Computing
- Service Composition and Orchestration
- Service-Oriented Architecture in Cloud Computing
- Standards and Specifications for Service-Oriented Computing

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**Market:** This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

**Xiaoyu Yang** is a Senior Member of Wolfson College, University of Cambridge, UK, and a Research Fellow in Reading e-Science Center, University of Reading, UK. He completed his post-doctoral research in the University of Cambridge in 2008. He earned an MSc degree in IT (2001) and a PhD degree in Systems Engineering (2006) from "Faculty of Computing Science and Engineering" at the De Montfort University, UK. He was previously a Research Associate in the Department of Earth Sciences and affiliated software engineer in Cambridge e-Science Centre at the University of Cambridge. He joined the School of Electronics and Computer Sciences at the University of Southampton, UK, as a Research Engineer after his post-doctoral research at Cambridge. Dr. Yang has participated or undertaken many EU framework projects, UK government funded research projects, and has a number of publications in referred journals. His technical interests include Systems Engineering, e-Science, Grid / Cloud computing, SOA, distributed system, and product lifecycle information management.

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