

# Resource Management of Mobile Cloud Computing Networks and Environments

Part of the Advances in Systems Analysis, Software Engineering, and High Performance Computing (ASASEHPC) Book Series

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## Description:

As more and more of our data is stored remotely, accessing that data wherever and whenever it is needed is a critical concern. More concerning is managing the databanks and storage space necessary to enable cloud systems.

**Resource Management of Mobile Cloud Computing Networks and Environments** reports on the latest advances in the development of computationally intensive and cloud-based applications. This publication covers a wide range of problems, solutions, and perspectives.

## Readers:

This book is a scholarly resource for specialists and end-users alike making use of the latest cloud technologies.

ISBN: 9781466682252

Release Date: March, 2015

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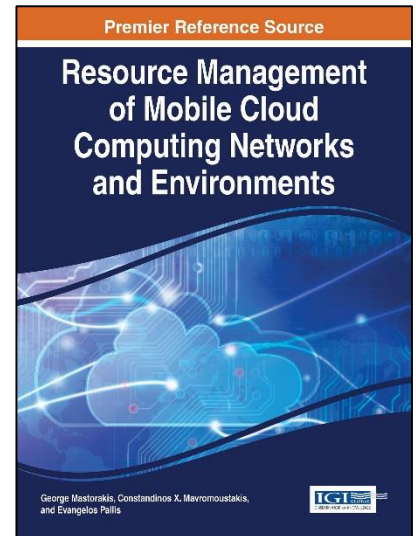
Pages: 399

## Topics Covered:

- Anomaly Detection
- Context Awareness
- Dependability Monitoring
- Dynamic Resource Migration
- Energy Conservation
- Media Streaming
- Mobile Cloud Offloading
- Virtualization Methods

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## Section 1

## Introduction and Applications of Mobile Cloud Computing

## Chapter 1

## Mobile Cloud Computing – An Introduction

*Jyoti Grover, Global Institute of Technology, India*

*Gaurav Kheterpal, Metacube, India*

## Chapter 2

## The Technical Debt in Cloud Software Engineering: A Prediction-based and Quantification Approach

*Georgios Skourletopoulos, Scientia Consulting S.A., Greece*

*Rami Bahsoon, University of Birmingham, UK*

*Constandinos X. Mavromoustakis, University of Nicosia, Cyprus*

*George Mastorakis, Technological Educational Institute of Crete, Greece*

## Chapter 3

## Anomaly Detection in Cloud Environments

*Angelos K. Marnerides, Liverpool John Moores University, UK*

## Section 2

## Mobile Cloud Resource Management

## Chapter 4

## Mobile Cloud Resource Management

*Konstantinos Katzis, European University Cyprus, Cyprus*

## Chapter 5

## A Social-oriented Mobile Cloud Scheme for Optimal Energy Conservation

*Constandinos X. Mavromoustakis, University of Nicosia, Cyprus*

*George Mastorakis, Technological Educational Institute of Crete, Greece*

*Athina Bourdena, University of Nicosia, Cyprus*

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*Christos Skeberis, Aristotle University of Thessaloniki, Greece*

*Thomas D. Xenos, Aristotle University of Thessaloniki, Greece*

## Chapter 6

## Traffic Analyses and Measurements Technological Dependability

*Rossitza Goleva, Technical University of Sofia, Bulgaria*

*Dimitar Atamian, Technical University of Sofia, Bulgaria*

*Seferin Mirtchev, Technical University of Sofia, Bulgaria*

*Desislava Dimitrova, ETH Zurich, Switzerland*

*Lubina Grigorova, Vivacom JSO, Bulgaria*

*Rosen Rangelov, Lufthansa Technik-Sofia, Bulgaria*

*Aneliya Ivanova, Technical University of Sofia, Bulgaria*

## Section 3

## Content Aware Streaming in Mobile Cloud

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## Adaptation of Cloud Resources and Media Streaming in Mobile Cloud Networks for Media delivery

*Jordi Mongay Batalla, National Institute of Telecommunications and Warsaw University of Technology, Poland*

## Chapter 8

## Context-awareness in Opportunistic Mobile Cloud Computing

*Radu-Corneliu Marin, University Politehnica of Bucharest, Romania*

*Radu-Ioan Ciobanu, University Politehnica of Bucharest, Romania*

*Radu Pasea, University Politehnica of Bucharest, Romania*

*Vlad Barosan, University Politehnica of Bucharest, Romania*

*Mihail Costea, University Politehnica of Bucharest, Romania*

*Ciprian Dobre, University Politehnica of Bucharest, Romania*

## Chapter 9

## H.265 Video Streaming in Mobile Cloud Networks

*Qi Wang, University of the West of Scotland, UK*

*James Nightingale, University of the West of Scotland, UK*

*Jose Alcaraz-Calero, University of the West of Scotland, UK*

*Chunbo Luo, University of the West of Scotland, UK*

*Zeeshan Pervaz, University of the West of Scotland, UK*

*Xinbeng Wang, University of the West of Scotland, UK*

*Christos Grecos, University of the West of Scotland, UK*

## Section 4

## Network and Service Virtualization

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## Virtualization Evolution: From IT Infrastructure Abstraction of Cloud

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*Harilaos Koumaras, NCSR Demokritos, Greece*

*Christos Damaskos, NCSR Demokritos, Greece*

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## Chapter 11

## Towards Ubiquitous and Adaptive Web-based Multimedia Communications via the Cloud

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*Kostas Kapetanakis, Technological Educational Institute of Crete, Greece*

*Athanasios Malamos, Technological Educational Institute of Crete, Greece*

## Chapter 12

## A Resource Prediction Engine for Efficient Multimedia Services Provision

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