



3rd CALL FOR CHAPTER PROPOSALS

Proposal Submission Deadline: **March 31, 2014**

Resource Management of Mobile Cloud Computing Networks and Environments

A book edited by:

Dr. George Mastorakis (Technological Educational Institute of Crete, Greece)

Dr. Constandinos X. Mavromoustakis (University of Nicosia, Cyprus)

Dr. Evangelos Pallis (Technological Educational Institute of Crete, Greece)

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For release in the [Advances in Systems Analysis, Software Engineering, and High Performance Computing \(ASASEHPC\) Book Series](#).

The **Advances in Systems Analysis, Software Engineering, and High Performance Computing (ASASEHPC) Book Series** brings together research in the areas of distributed computing, systems and software engineering, high performance computing, and service science. This collection of publications is useful for academics, researchers, and practitioners seeking the latest practices and knowledge in this field.

Introduction

As an increasing number of users computationally communicate and collaborate over the Internet, via different accessing systems and mobile devices, the need for a reliable management of resources in mobile cloud computing environments has become manifest to facilitate ubiquitous availability and efficient access to large quantities of distributed resources. The mobile cloud computing paradigm is set to drive technology over the next decade and integrate the resources availability through the 3As (Anywhere, Anything, Anytime). There are a lot of challenges to meet, in order to have the mobile cloud computing paradigm applicable in all aspects and in an efficiently utilized manner. Itself this poses a fertile ground and a hot research and development area for mobile cloud computing in both academia and industry. In this context, open-ended issues will be addressed in this book like the efficient and reliable management of distributed resources in mobile clouds, which is incrementally becoming important due to the increase in the number of users and the available resources through their running applications.

Objective of the Book

The book will focus on a new communication paradigm, elaborating on modeling, analysis and efficient resource management in mobile cloud computing



environments. It will explore challenges, including current research efforts and provide scientific information about various aspects of mobile cloud computing, ranging from basic concepts to research grade material, including future directions. This book will capture the current state of resource management in such environments and will be a solid source of comprehensive reference material on the related research field. It will be intended for researchers, practitioners in the field, engineers and scientists involved in the design and development of mobile cloud computing systems and their applications. The book can also be used as the textbook for under-graduate or post-graduate academic courses.

The overall objectives and mission of the book are given as follows:

- 1) As the book will cover a wide range of mobile computing applications and scenarios, where mobile cloud can be applied, the material covered will be readable and a solid base for introduction into the comprehensive reference in the related research field;
- 3) The book will deal with an important and timely topic of emerging mobile cloud computing paradigm of tomorrow. It will present accurate, up-to-date information on a broad range of topics and material authored by experts in the field;
- 4) This book will attempt to strike a balance between (i) resource management methodologies in mobile cloud computing, (ii) modeling, analysis and efficient resource management of mobile cloud computing environments, (iii) newly introduced technologies, facing the scarceness of resources, (iv) model formulation for resources management in wireless systems;
- 5) The book will have a broad appeal to computer science professionals, software and telecommunications engineers and will be widely recognized in the related scientific field. It will include novel research approaches in one single volume, for the benefit of various scientific disciplines;

Target Audience

The book will adopt an interdisciplinary approach and its final form will reflect both theoretical and practical approaches, in order to be targeted in multiple audiences. The intended audiences will include researchers, scientists, engineers and professionals in the field of mobile networks and cloud computing. It can also be a reference for selection by the audience with multiple field backgrounds, such as College and University under-graduate or post-graduate students for potential use in their computing courses, as well as researchers and scientists for exploitation in Universities and Institutions.

Recommended topics include, but are not limited to, the following:

- Mobile cloud computing
- Cloud computing resource management
- Wireless cloud systems



- Cloud computing network architectures
- Cloud computing resource manipulation
- Mobile cloud computing applications
- Mobile cloud performance evaluation
- Virtual systems architectures

We strongly welcome other topic suggestions, dealing with resource management in mobile cloud computing environments. The book will have 9 sections with the associated chapters - tentatively planned - as follows:

Section I — Introduction and applications of mobile cloud computing

Section II— Peer-to-Peer systems for mobile cloud

Section III— Mobile cloud resource management

Section IV— Resource manipulation issues in mobile cloud systems

Section V— Content-aware streaming in mobile cloud

Section VI— Innovative energy-efficient storage mechanisms in mobile cloud networks

Section VII— Performance evaluation of mobile cloud systems

Section VIII— Network and service virtualization

Section IX—Failure-aware dependability in mobile cloud networks

Submission Procedure

Researchers are invited to submit *on or before* **March 31, 2014**, a 2-3 page chapter proposal clearly explaining the mission and concerns of his or her proposed chapter. Authors of accepted proposals will be notified by **April 15, 2014** about the status of their proposals and sent chapter guidelines. Full chapters are expected to be submitted by **May 31, 2014**. All submitted chapters will be reviewed on a double-blind review basis. Contributors may also be requested to serve as reviewers for this project. Proposals and full chapters have to be submitted through the easy chair platform:

<https://www.easychair.org/conferences/?conf=rmmobicloud14>

Publisher

This book is scheduled to be published by IGI Global (formerly Idea Group Inc.), publisher of the “Information Science Reference” (formerly Idea Group Reference), “Medical Information Science Reference,” “Business Science Reference,” and “Engineering Science Reference” imprints. For additional information regarding the publisher, please visit www.igi-global.com. This publication is anticipated to be released in 2015.

Important Dates

March 31, 2014:	Proposal Submission Deadline
April 15, 2014:	Notification of Acceptance
May 31, 2014:	Full Chapter Submission
July 31, 2014:	Review Results Returned



August 31, 2014: Final Chapter Submission

Inquiries can be forwarded to:
Dr. George Mastorakis
Technological Educational Institute of Crete
E-mail: gmastorakis@ieee.org