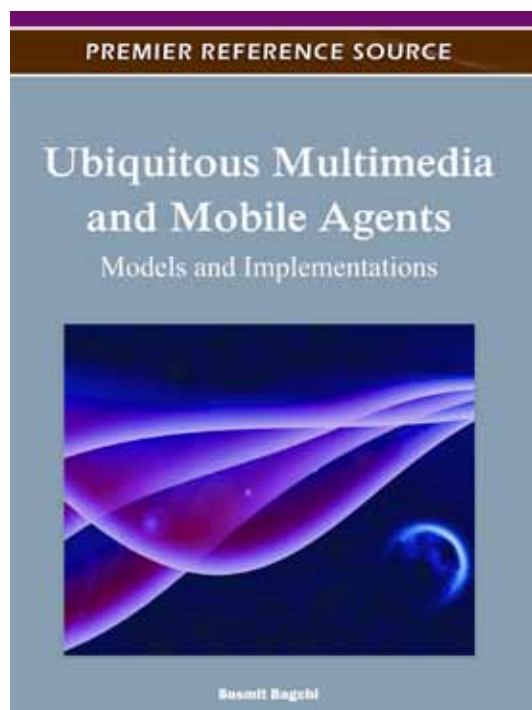


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## Ubiquitous Multimedia and Mobile Agents: Models and Implementations



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Susmit Bagchi (Gyeongsang National University, South Korea)

Ubiquitous multimedia systems, or mobile multimedia systems, offer the promise of pervasive delivery of multimedia content to mobile users and their handheld devices.

**Ubiquitous Multimedia and Mobile Agents: Models and Implementations** provides the hybridization of two paradigms, namely, ubiquitous/mobile multimedia and mobile agents, where mobile agents act as the platform to realize mobile multimedia delivery infrastructure. Ubiquitous multimedia systems involve user/creator authentication, media adaptation, data delivery over wireless network, QoS awareness, and user-mobility management. On the other hand, mobile agent technology is appropriate for the realization of a wide range of high-end mobile applications. Agents and mobile agents are capable of tackling various challenges faced by mobile multimedia delivery infrastructure. This book serves as an excellent reference for the latest research and models in ubiquitous multimedia.

### Topics Covered:

- Agent Migration
- Middleware
- Mobile/Ubiquitous Multimedia Systems Infrastructure
- Multimedia Content Discovery
- QoS Management for Mobile Multimedia
- Resource Management
- Simulation
- Software Design
- User Authentication
- User-Mobility Management

**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.

**Dr. Susmit Bagchi** has received Bachelor of Science (B.Sc.) degree with honours from the University of Calcutta, India in 1993. He received Bachelor of Engineering (B.E.) degree in Electronics Engineering from Nagpur University, India and Master of Engineering (M.E.) degree in Electronics & Telecommunication Engineering from the Bengal Engineering and Science University, Shibpur, India in the year 1997 and 1999, respectively. He obtained Ph.D. (Engineering) degree in Information Technology from the Bengal Engineering and Science University, Shibpur, India in the year 2008. He has the diverse work experiences in both academia and industrial research environments. He worked for Defence R&D (India) as Scientist, Samsung R&D (India and S. Korea) as R&D Engineer/Technical Lead and Norwegian University of Science and Engineering (Norway) as a researcher. He also worked for Bengal Engineering and Science University (India) as a Lecturer and for the Sikkim Manipal University (India) as Reader. Currently, he is holding the position of Assistant Professor in the Department of Informatics, Gyeongsang National University (South Korea). His main research interests are comprised of Distributed Computing Systems and advanced Operating Systems.

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*Quality-Oriented Mobility Management for Multimedia Content Delivery to Mobile Users*

Ciubotaru Bogdan (Dublin City University, Ireland)  
Muntean Gabriel-Miro (Dublin City University, Ireland)

#### Chapter 2

*Mobile Agent Systems*

Siddiqui Farhan (Walden University, USA)  
Zeadally Sherali (University of the District of Columbia, USA)  
Basu Kashinath (Oxford Brookes University, UK)

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*An Agent-Based Approach to Adapt Multimedia Web Content in Ubiquitous Environment*

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Sarnè Giuseppe M.L. (University of Reggio Calabria, DIMET, Italy)

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*Personalized Content Representation through Hybridization of Mobile Agent and Interface Agent*

Sajja Priti Srinivas (Sardar Patel University, India)

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*Mobile Agent-Based Collaborative Computing Framework for Handling Constraint Resources*

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Agarwal Sanjeev (Missouri University of Science and Technology, USA)  
Madria Sanjay K (Missouri University of Science and Technology, USA)

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*Distributed Video Coding and Content Analysis for Resource Constraint Multimedia Applications*

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