Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering

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This volume is the result of the 8th EAI International Conference on Mobile Networks and Management (MONAMI), which was held in Abu Dhabi, United Arab Emirates, during October 23–24, 2016, hosted by New York University Abu Dhabi.

The MONAMI conference series aims at bringing together top researchers, academics, and practitioners specializing in the area of mobile network management, service management, virtualization and object management. Multi-access and resource management, mobility management, and network management have emerged as core topics in the design, deployment, and operation of current and future networks. Yet, they are treated as separate, isolated domains with very little interaction between the experts in these fields and lack cross-pollination. Recently, new avant-garde techniques and solutions have emerged; as notable examples, network function virtualization, software-defined networking, network virtualization, and the cloud paradigm have taken root. All in all, these techniques bring about new requirements and scientific challenges, and migration strategies are required to provide a smooth transition from today’s legacy systems to future systems. At the same time, new wireless broadband access technologies, in what has been referred to as 5G, are posing new challenges and requirements that need to be taken into account; energy efficiency, densification, off-loading are examples of the new issues the scientific community is currently addressing.

Dr. Polly Huang from National Taiwan University officially opened the conference with her vision on “User-Centric Multimedia Networking for the Mobile Era — How to Strike a Balance between User Demand and Scarce Resources.” In addition, the conference featured a half-day tutorial: “Programming and Networking for the Internet of Things Using RIOT, the Friendly OS for the IoT,” presented by Peter Kietzmann (HAW Hamburg/RIOT Community).

After a thorough peer-review process, 16 papers were selected for inclusion in the main track of the technical program. Most papers were reviewed by three competent researchers, including at least one Technical Program Committee (TPC) member. This volume includes the revised versions of all papers that were presented at MONAMI 2016 in a single-track format. All MONAMI 2016 newcomers acknowledged the collegial atmosphere that characterizes the conference, making it an excellent venue, not only for presenting novel research work, but also for fostering stimulating discussions between the attendees.

This volume is organized thematically in four parts, starting with “Cloud Computing and Software Defined Networking” in Part I. “Internet-of-Things and Vehicular Networks” are discussed in Part II. Part III presents novel “Techniques and Algorithms for Cellular Networks,” while Part IV deals with “Security and Self-Organizing Networks.”

We close this short preface to the volume by acknowledging the vital role that the TPC members and additional referees played during the review process. Their efforts ensured that all submitted papers received a proper evaluation. We thank EAI and ICST for assisting with organization matters, and New York University for hosting
MONAMI 2016. The team that put together this year’s event is large and required the sincere commitment of many folks. Although too many to recognize here by name, their effort should be highlighted. We particularly thank Barbara Fertalova, Ivana Allen, and Sinziana Vieriu for their administrative support on behalf of EAI, and Prof. Imrich Chlamtac of CREATE-NET for his continuous support of the conference. Finally, we thank all delegates for attending MONAMI 2016 and making it such a vibrant conference!

November 2016

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