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Pélagie Houngue · Hénoc Soude (Eds.)

e-Infrastructure and e-Services for Developing Countries

11th EAI International Conference, AFRICOMM 2019
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Proceedings

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Preface

We are delighted to introduce the proceedings of the 11th edition of the 2019 European Alliance for Innovation (EAI) International Conference on e-Infrastructure and e-Services for Developing Countries (AFRICOMM 2019). This conference has brought together researchers, developers, and practitioners who are leveraging and developing new technologies such as cloud computing, IoT, data analytics, green computing, etc. in developing countries. Deploying efficient and effective infrastructures and solutions when limited resources are available is a challenging task and a key-enabler for the diffusion of Information and Communication Technologies (TCT) in developing countries. The aim of this conference is to bring together international researchers, students, engineers, policy makers, and practitioners in ICT to discuss issues and trends, recent research, innovation advances, and on-the-field experiences related to e-Governance, e-Infrastructure, and e-Business with a focus on developing countries.

The technical program of AFRICOMM 2019 received 49 submissions, including full and short papers. 18 papers were accepted as full papers. Authors were from different countries including Benin, Tunisia, South Africa, Senegal, Italy, Burkina Faso, Ivory Coast, Germany, Namibia, etc. Some contributions were also joint between several institutions and countries.

The accepted papers cover several topics related to emerging technologies and their use in developing countries in particular, and in rural areas in general. These topics span different infrastructures, technologies and paradigms, and application fields. Examples include targeted infrastructures, Internet of Things (IoT), Wireless and Mobile Networks, Intelligent Transportation Systems (ITS), Software and Network Security, Cloud and Virtualization, Data Analytics, Machine Learning, etc. The conference tracks were as follows: Track 1 – Software and Network Security; Track 2 – Smart Cities; Track 3 – Internet of Things (IoT); and Track 4 – Data Management and IT Applications. Aside from the high-quality technical paper presentations, the technical program also featured two keynote speeches and an AFRICATEK workshop. The two keynote speakers were Mr. Pierre Dandjinou Ican (Vice President of Stakeholder Engagement in Africa, Benin) and Mr. Colombiano Kedowide (Consultant and IT expert, Canada). The AFRICATEK workshop focused on African's personal data security issues and on an Artificial Intelligence (AI) based prediction system, which improves student academic performances.

Coordination with the steering chairs was essential for the success of the conference. We sincerely appreciated their constant support and guidance. It was also a great pleasure to work with such an excellent Organizing Committee and we thank the team for their hard work in organizing and supporting the conference. In particular, the Technical Program Committee (TPC), led by our TPC Co-Chairs, Dr. Pélagie Houngue and Dr. Henoc Soude, completed the peer-review process of technical papers and made a high-quality technical program. We are also grateful to conference manager,

Kristina Lappyova, for her support as well as all the authors who submitted their papers to the AFRICOMM 2019 conference and workshop.

We strongly believe that the AFRICOMM 2019 conference provided a good forum for all researcher, developers, and practitioners to discuss all science and technology aspects that are relevant to smart grids. We also expect that the future AFRICOMM conference will be as successful and stimulating, as indicated by the contributions presented in this volume.

December 2019

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