

13th EAI International Conference, AFRICOMM 2021 Zanzibar, Tanzania, December 1–3, 2021 Proceedings





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

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# e-Infrastructure and e-Services for Developing Countries

13th EAI International Conference, AFRICOMM 2021 Zanzibar, Tanzania, December 1–3, 2021 Proceedings



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#### **Preface**

We are delighted to introduce the proceedings of EAI AFRICOMM 2021 - the 13th EAI International Conference on e-Infrastructure and e-Services for Developing Countries. This conference brought together researchers, practitioners, and policy makers around the world to share recent research findings, innovation advances, and in-the-field experiences related to e-infrastructures and e-services, along with their associated policy and regulations, with a focus on developing countries.

The program of AFRICOMM 2021 consisted of 31 full papers. In recognition of the challenges imposed by the COVID-19 pandemic, the conference organized a workshop to share experience on digital leaning and teaching at the time of pandemic, which garnered three papers. Aside from the high-quality technical paper presentations, the technical program also featured two keynote speeches delivered by Ian F. Akyildiz from the Technology Innovation Institute (TII) Abu Dhabi, United Arab Emirates, with the title "Maritime Communication: Research Challenges And Directions", and by Fisseha Mekuria of CSIR, South Africa, titled "Smart Spectrum Sharing: a Path to Connect the Unconnected and Address 5G and Beyond High Spectrum Demand".

Coordination with the steering chair Imrich Chlamtac was essential for the success of the conference. We sincerely appreciate his constant support and guidance. It was also a great pleasure to work with such an excellent organizing committee team, led by Elias Towe, for their hard work in organizing and supporting the conference. In particular, we thank the Technical Program Committee, TPC Chair Yahya Hamad Sheikh, the TPC Co-Chairs, Bernd Westphal and Maryam Jaffar Ismail who completed the peer-review process of technical papers and a high-quality technical program. We are also grateful to Conference Managers Natasha Onofrei and Karina Ogandjanian for their support and all the authors who submitted their papers to the AFRICOMM 2021 conference and workshop.

We strongly believe that the AFRICOMM conference provides a good forum for all researchers, developers, practitioners, and policy makers to discuss all science and technology aspects that are relevant to e-infrastructures and e-services, and we expect that the future AFRICOMM conferences will be as successful and stimulating as this year's, as indicated by the contributions presented in this volume.

Yahya H. Sheikh Abubakar D. Bakar Idris A. Rai

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