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Fisseha Mekuria · Ethiopia Nigussie ·  
Tesfa Tegegne (Eds.)

# Information and Communication Technology for Development for Africa

Second International Conference, ICT4DA 2019  
Bahir Dar, Ethiopia, May 28–30, 2019  
Revised Selected Papers

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# Preface

The proceedings of the second edition of the International Conference on ICT for Development for Africa (ICT4DA), which was organized by the Bahir Dar Institute of Technology in Ethiopia, is hereby presented. The proceedings of ICT4DA 2019 conference was compiled in collaboration with international experts. The conference brings together researchers, developers, and practitioners of ICT for development from around the world. The theme of this year's ICT4DA was "Enabling Sustained & Inclusive Economic Development through ICT Innovations."

The conference program consisted of oral presentations of 29 technical papers. These technical papers were accepted out of the 69 papers received during a paper submission period. The papers were accepted after a technical peer review process. The technical papers were categorized into three tracks, Track 1: Intelligent Systems and Data Science; Track 2: Wireless Communication and Emerging Networking; and Track 3: Natural Language Processing. Besides the technical paper presentations, the technical program also featured three keynote speeches. The three keynote speakers along with the title of the talks were, Keynote 1: "Internet-of-Things for Development in Africa: opportunities and challenges," Adj. Prof. Ethiopia Nigussie from University of Turku, Finland; Keynote 2: "Impact of Noise on Big Data Analytics," Prof. Bhekisipho Twala from University of Johannesburg, South Africa; and Keynote 3: "International collaboration in ICT4D research and development: opportunities, challenges and best practices for sustainability," Prof. Judy van Biljon from University of South Africa. In addition, two panel discussions under the following themes were included, Panel 1: "The role of Emerging ICT Technologies as a Solutions Revolution for the UN-SDGs," chaired by Prof. Fisseha Mekuria and Dr. N. Bekele-Thomas; and Panel 2: "Emerging ICT technologies in Support of Sustainable Bilateral & Institutional Collaboration in Africa," chaired by Dr. Ethiopia Nigussie.

The coordination of the ICT4DA 2019 conference was led by the General Chair of ICT4DA, Dr. Tesfa Tegegne, and the contribution of the Organizing Committee was instrumental for the success of the conference. It was also a great pleasure to work with such an excellent Organizing Committee, and we thank them for their hard work in organizing and supporting the conference. In particular, the Technical Program Committee (TPC) members, led by the TPC chair, Prof. Fisseha Mekuria (CSIR, South Africa), and co-chair, Adj. Prof. Ethiopia Nigussie (University of Turku), who completed the peer-review process of the technical papers and created a high-quality technical program relevant to the conference's theme. We are also grateful to all the authors who submitted their papers, contributing to the success of the ICT4DA 2019 conference. We strongly believe that the ICT4DA 2019 conference provided a good forum for all involved researchers, developers, practitioners, and public/private industry players to discuss ICT technology trends and research aspects that are relevant

for socioeconomic development. We also expect that future ICT4DA conferences will be as successful and stimulating, as the conference series continues to develop and deliver relevant and innovative contributions to the global knowledge in ICT4D as presented in this volume.

April 2019

Tesfa Tegegne  
Fisseha Mekuria  
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