Mulatu Liyew Berihun (Ed.)

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9th EAI International Conference, ICAST 2021
Hybrid Event, Bahir Dar, Ethiopia, August 27–29, 2021
Proceedings, Part II

Part 2

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Preface

We are delighted to introduce the proceedings of the ninth edition of the EAI International Conference on Advancements of Science and Technology (EAI ICAST 2021). EAI ICAST 2021 is an annual conference that takes place at Bahir Dar Institute of Technology, Bahir Dar University, Bahir Dar, Ethiopia. The conference covers topical science and technology issues and has brought together researchers, engineers, developers, practitioners, scholars, scientists, and academicians from around the world.

The technical program of EAI ICAST 2021 consisted of seven main tracks: Track 1, Chemical, Food and Bioprocess Engineering; Track 2, Electrical and Electronics Engineering; Track 3, ICT, Software and Hardware Engineering; Track 4, Civil, Water Resources, and Environmental Engineering; Track 5, Mechanical and Industrial Engineering; Track 6, Material Science and Engineering; and Track 7, Energy Science, Engineering and Policy. A total of 202 full papers were submitted, from which 102 papers were accepted in a peer reviewed process. Each paper was reviewed by on average three reviewers who are experts in the area. After a thorough evaluation process, the technical program consisted of 80 high quality full research papers in oral presentation sessions in the seven main conference tracks. The technical program of EAI ICAST 2021 also featured one invited talk, three keynote speeches, and seven session keynote speeches along with exhibitions and 12 poster presentations. The three keynote speakers were Timnit Gebru, the cofounder of Black in Al from the USA; Girma Gebresenbet from the Swedish University of Agricultural Science, Sweden; and Yilma Sileshi from the Addis Ababa Institute of Technology, Addis Ababa University, Ethiopia.

We sincerely appreciate the work of the Steering Committee chair and members, the Organizing Committee chair, Kibret Mekuanint, the Organizing Committee co-chairs, Mekuanint Agegnehu and Elias Wagari, and the Technical Program Committee (TPC) chair, Mulatu Liyew Berihun, for their constant support and guidance which ensured the success of the conference. It was also a great pleasure to work with such an excellent Organizing Committee team, we note that their hard work in organizing and supporting the conference. We are grateful to the Technical Program Committee led by our TPC chair, Aynadis Molla (Track 1), Hailu Desalegn (Track 2), Mekonnen Wagaw (Track 3), Mitiku Damtie (Track 4), Betsha Tizazu (Track 5), Misganaw Alemu (Track 6), and Muluken Temsgen (Track 7). They followed and completed the peer-review process for the technical papers and designed a high-quality technical program. We are also grateful to the conference manager, Viltare Platzner, for her support, and all the authors who submitted their papers to the EAI ICAST 2021 conference.

We strongly believe that the EAI ICAST 2021 conference provided a good forum for all scientific communities and a scientific body of knowledge we could use to discuss all science and technology aspects relevant to each track. We also expect that future EAI ICAST conferences will be as successful and stimulating, as indicated by the contributions presented in this volume.

Mulatu Liyew Berihun

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