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# Communications and Networking

16th EAI International Conference, ChinaCom 2021 Virtual Event, November 21–22, 2021 Proceedings



Editors Honghao Gao Shanghai University Shanghai, China

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Yulong Shen Xidian University X'ian, China Jun Wun Fudan University Shanghai, China

Feifei Shen Tsinghua University Beijing, China

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# **Preface**

We are delighted to introduce the proceedings of the 16th European Alliance for Innovation (EAI) International Conference on Communications and Networking in China (ChinaCom 2021). This conference brought together researchers, developers, and practitioners around the world who are interested in communications and networking from the viewpoint of big data, cloud computing, sensor networks, software-defined networks, and so on.

The technical program of ChinaCom 2021 consisted of 52 papers, including 47 full papers and 5 workshop papers in oral presentation sessions at the main conference tracks. The conference sessions were as follows: Session 1 - Scheduling and Transmission Optimization in Edge Computing; Session 2 - Complex System Optimization in Edge Computing; Session 3 - Network Communication Enhancement; Session 4 - Signal Processing and Communication Optimization; Session 5 - Deep Learning and Vehicular Communication; Session 6 - Edge Computing and Deep Learning; Session 7 - Finite Blocklength and Distributed Machine Learning; Session 8 - Deep Learning and Network Performance Optimization; and Session 9 - Edge Computing and Reinforcement Learning. Apart from high-quality technical paper presentations, the technical program also featured a keynote speech and a technical workshop. The keynote speech delivered by Antonio Iera from the University of Calabria, Italy, introduced the concept of 'social digital twins', while the Workshop on Data Intensive Services based Application (DISA) aimed to encourage academic researchers and industry practitioners to present and discuss all methods and technologies related to research and experiences in a broad spectrum of data-intensive services-based applications.

Coordination with the steering chair, Imrich Chlamtac, was essential for the success of the conference. We sincerely appreciate the constant support and guidance. It was also a great pleasure to work with such an excellent organizing committee team for their hard work in organizing and supporting the conference. In particular, we are grateful to the Technical Program Committee who completed the peer-review process for the technical papers and helped to put together a high-quality technical program. We are also grateful to Conference Manager Lucia Sladeckova for her support and all the authors who submitted their papers to the ChinaCom 2021 conference including the DISA workshop.

We strongly believe that the ChinaCom conference provides a good forum for all researchers, developers, and practitioners to discuss all science and technology aspects that are relevant to communications and networking. We also expect that the future

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ChinaCom conferences will be as successful and stimulating as this year's, as indicated by the contributions presented in this volume.

November 2021

Honghao Gao Jun Wu Jianwei Yin Feifei Gao Yulong Shen Jun Yu Chunguo Li Yueshen Xu

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