

CORETA 2023

Forward

The Advances on Core Technologies and Applications - Building with and around AI, ML, IoT, 5G, Mobility and Cognition 2023 (CORETA 2023), held between September 25th and September 29th, 2023, continued a series of international events covering challenges to make use and correlate results in different scientific and technological achievements.

A plethora of intertwined technologies and applications have been raised during the recent years because of maturity of core approaches related to Artificial Intelligence (AI), Machine Learning (ML), Deep Learning (DL), and Cognitive Computing (CC) domains. In parallel, new technologies like 5G, tactile Internet, spatial and terrestrial communications augmented the speed and computing possibilities of networking systems.

Citizen-centric services, as well as innovations in transportation, healthcare, industry, and economy, in general become provocative challenges due to complexity, diversity and the increasing needs of our society. In the virtual eco-systems, where robots are part of society as well, robot-driven industry, robot-citizen care, behavior analytics, affective computing, and empathy set the search for practical applications of deep-learning and knowledge discovery.

While progress is visible, sensitive aspects related to privacy, digital forgery, assisted-living, and semantic processing of the enormous information collected for IoT and wearable devices are still partially solved. Apart intrinsic citizen-focused issues, new self-driven systems and parts (drones, vehicular systems), sustainable and green energy, protection of critical systems, and smart cities challenges ask for innovative correlation and real-time solutions based on the core-technologies and applications mentioned above.

We take here the opportunity to warmly thank all the members of the CORETA 2023 technical program committee, as well as all the reviewers. The creation of such a high-quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and effort to contribute to CORETA 2023. We truly believe that, thanks to all these efforts, the final conference program consisted of top-quality contributions. We also thank the members of the CORETA 2023 organizing committee for their help in handling the logistics of this event.

We hope that CORETA 2023 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of core technologies and applications.

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