

## Chair's Welcome

On behalf of the organizing committee, we would like to warmly welcome you to the IEEE COINS 2020 conference in Barcelona, Spain. IEEE COINS holds its second conference this year with the help of IEEE Council on Electronic Design Automation (CEDA), IEEE Communications Society (ComSoc), IEEE Circuits and Systems Society (CAS), IEEE Robotics and Automation Society (RAS), IEEE IoT Initiative, IEEE Spain, ComSoc Technical Committee on Big Data, and ComSoc Technical Committee on eHealth.

The Internet of Things (IoT) starts affecting all aspects of our life, from building smart homes, smart cars, smart city, to smart health, smart environment. People benefit from the convenience of autonomous driving, Vehicle-to-Vehicle (V2V) connection, to various digital voice assistants. What we saw in Sci-Fi movies materialize to tangible and affordable technologies tacitly integrating with our daily routine. This transformation can be truly seen, heard, and touched by everyone. In this technology revolution, we shall never omit the vast infrastructure change beneath. The Internet-of-Things wave is built upon rapid growing and prevailing cloud technologies, the evolution of edge technologies, minimalization in device size, and powerful acceleration of computing capability in edge devices. Furthermore, machine learning and data science, as a core of this artificial intelligence revolution, empower every device, edge, cloud layers to become smarter. Therefore, we introduce the concept of omni-layer intelligence system to link and share the intelligence between different architecture levels, i.e., device, edge to cloud, AI to smart applications. Last but not least, IEEE COINS directly addresses the challenges of reliability, security and privacy issues in omni-layer architecture, which become a concern in this technology revolution wave.

We would also like to take this opportunity to thank all the attendees to witness this big event that gathers all great interest in the research community and industry frontiers. We also would like to acknowledge Dr. Sani Nassif for his advice throughout this initiative, which we hope to continue, grow, and thrive for the years to come. We would especially like to thank all the steering committee and review committee members who worked hard to make this event happen. We hope you enjoy IEEE COINS 2020, and we look forward to meeting you again in COINS 2021.

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