

How AI will shape Smart Networks and Services of the future

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Abstract

The transformative role of Telecommunications and Information Communication Technologies (ICT) has long been witnessed as a precursor of the scientific progress and economic growth in the modern world. The 5G (fifth generation of mobile networks) is currently being deployed: this ongoing Digital Transformation is already bringing techno-economic progresses and far-reaching benefits are foreseen for our Society. What are the trends that will drive the development of the sixth-generation technologies? In particular, what will be the role of Artificial Intelligence in this evolution towards Smart Networks and Services? Certainly, AI is expected to become increasingly pervasive in 6G thus opening new services opportunities. On the other hand, AI will be more and more distributed and energy-hungry for processing ever growing huge data sets in (almost) real-time. Are we ready to face these challenges?

Bio



Antonio Manzalini received the M. Sc. Degree in Electronic Engineering from the Politecnico of Turin (Italy) and the PhD (cum Laude) on Computer Networks from Sorbonne Universités (France). In 1990 he joined Telecom Italia Lab (formerly CSELT). He started his job contributing to RT&D activities on technologies and architectures for transport optical networks. He was actively engaged (1996-2000) in ITU-T Standardization as Rapporteur. He joined several EURESCOM and European Project playing several responsibility roles. He chaired

for four years the IEEE initiative on SDN, and currently he is joining the Board of IEEE Comsoc Industry Committee. He served as General Chair of the several IEEE Conferences. He owns seven patents on methods and systems for Telecommunications. His results have been published in more than 130 of technical papers and publications. In 2019 he was awarded as IEEE Industrial Distinguished Lecturer. Currently, his activities include SDN-NFV, 5G, Edge Computing, Artificial Intelligence and Quantum Communications. He is currently Chair of IG GSMA work-item on Quantum Technologies and Services.