# **EMERGING 2025**

## **Forward**

The Seventeenth International Conference on Emerging Networks and Systems Intelligence (EMERGING 2025), held between September 28<sup>th</sup>, 2025, and October 2<sup>nd</sup>, 2025, in Lisbon, Portugal, continued a series of international events to present and evaluate the advances in emerging solutions for next-generation architectures, devices, and communications protocols. Particular focus was aimed at optimization, quality, discovery, protection, and user profile requirements supported by special approaches such as network coding, configurable protocols, context-aware optimization, ambient systems, anomaly discovery, and adaptive mechanisms.

Next generation large, distributed networks and systems require substantial reconsideration of exiting 'de facto' approaches and mechanisms to sustain an increasing demand on speed, scale, bandwidth, topology and flow changes, user complex behavior, security threats, and service and user ubiquity. As a result, growing research and industrial forces are focusing on new approaches for advanced communications considering new devices and protocols, advanced discovery mechanisms, and programmability techniques to express, measure and control the service quality, security, environmental and user requirements.

We take here the opportunity to warmly thank all the members of the EMERGING 2025 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 EMERGING 2025. 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 EMERGING 2025 organizing committee for their help in handling the logistics of this event.

We hope that EMERGING 2025 was a successful international forum for the exchange of ideas and results between academia and industry for the promotion of progress in the field of emerging networks and systems intelligence.

#### **EMERGING 2025 Chairs**

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