

Call for Papers:

The 2nd Workshop on Next-Generation Intelligent and Resilient Mobile Networking and Computing (NGMobile 2022)
In conjunction with IEEE ICDCS 2022
July 10th - July 13th, 2022, Bologna, Italy

https://ngmobile2022.github.io/

As 5G mobile networks are emerging, there are incredible interests by various stakeholders in developing innovative technologies and applications to enhance 5G and/or enable the next generation of mobile networking and computing. The next-generation network systems are expected to support a broad range of services, incorporating communications, computation, cooperation, and intelligent decision making. Especially, AI and machine learning techniques will be used in the future network systems to enhance performance and autonomous operations capabilities. Further, these new technologies will not only improve the performance in throughput, latency, efficiency, and connection density but also enhance system resiliency to ensure robust networking and computing with high security, adaptivity, and autonomy.

This Workshop serves as a forum for scientists and engineers in both academia and industry to discuss their original research work, findings, and experiences on the innovations to enhance performance and resiliency for the various aspects of next-generation mobile networking and computing.

All accepted and presented papers will be published in the <u>IEEE ICDCS conference proceedings</u> and included in the IEEE Xplore.

Topics of interest include, but are not limited to, the following:

- 5G enhancement/6G/next-G mobile networking architectures and protocols
- Adaptive Cloud-RAN and Fog-RAN
- Resilient massive MIMO/NOMA /mmWave/Terahertz communications
- Reliable low-latency communications
- Resilient Internet of Things (IoT) and machine-type communications
- Cross-layer wireless network design
- QoS/QoE in next-generation wireless networks
- Drone/UAV networking
- Vehicular networking (V2V/V2I/V2X)

- Adaptive/intelligent/robust architectures, protocols, algorithms and systems for mobile edge/fog/cloud computing
- Distributed storage and computing at the network edge
- Resource allocation and orchestration
- Network virtualization
- AI/ML for wireless networks
- AI/ML for edge/cloud computing

- Spectrum sensing, coordination and adaptation
- spectrum/radio network anomaly, intrusion, and attack detection/prevention
- Wireless network security (physical layer, application layer, etc.)
- Novel mobile applications and services e.g., Augmented /Virtual/eXtended Reality (AR/VR/XR), autonomous driving, etc.

Submission Guidelines:

Submitted papers must be original and unpublished, and must not be submitted for publication elsewhere concurrently. All paper submissions should follow the IEEE 8.5" x 11" Two-Column Format. Each submission must not exceed 6 pages including references.

Electronic submission site: https://easychair.org/conferences/?conf=ngmobile2022

All submitted manuscripts will be peer-reviewed by the program committee members. Each accepted paper must have at least one author registered and be presented during the conference in order for the paper to be included into the IEEE Xplore digital library.

Important Dates:

Paper submission: February 15, 2022Paper notification: April 1, 2022

Camera ready: April 20, 2021