#### Organisers:





Technical Co-Sponsorship









IEEE Serbia and Montenegro Section
Serbia and Montenegro IEEE MTT-S Chapter



INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGIES SYSTEMS AND SERVICES IN TELECOMMUNICATIONS

## TELSIKS 2025

**SERBIA, NIŠ, OCTOBER 22 - 24, 2025** 

#### PROCEEDING OF PAPERS

CATALOG NUMBERS

Part Number: CFP25488-USB

ISBN:

979-8-3315-4415-7

Copyright and Reprint Permission: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. For reprint or republication permission, email to IEEE Copyrights Manager at pubs-permissions@ieee.org. All rights reserved. Copyright© 2025 by IEEE.

Technical inquiries: Biljana Stosić, +381 18 529303, biljana.stosic@elfak.ni.ac.rs

2025 17<sup>th</sup> International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)









# TELSIKS 2025

**Proceedings of Papers** 

### 2025 17th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS)

Serbia, Niš, October 22 - 24, 2025

Proceeding of Papers

Editors: Prof. Dr. Nebojša S. Dončov

Prof. Dr. Zoran Ž. Stanković Prof. Dr. Biljana P. Stošić

Technical Support: Prof. Dr. Biljana P. Stošić

MSc. Ksenija Mladenović

Published by: Institute of Electrical and Electronics Engineers (IEEE)

Faculty of Electronic Engineering, University of Niš, Serbia

Printing of this edition has been financially supported by Ministry of Education, Science and Technological Development of Republic of Serbia

IEEE Catalog Number: CFP25488-USB

ISBN: 979-8-3315-4415-7 (IEEE)

Copyright and Reprint Permission: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. For reprint or republication permission, email to IEEE Copyrights Manager at pubs-permissions@ieee.org. All rights reserved. Copyright ©2025 by IEEE.