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GENERAL CO-CHAIRS MESSAGE

Dear participants and colleagues, it is our pleasure to welcome you to the SoftCOM 2026 conference. We are excited to have an opportunity to take part in the organization of an international conference that gathers researchers and professionals from academia and industry to share experiences and new ideas in such a dynamic area as Information and Communication Technology. Technology is increasingly shaping the prosperity of countries and companies. The development of disruptive technologies such as AI, along with geopolitical events, is creating new arenas of competition, centred on investment in the innovation, production, and adoption of advanced technologies. AI is a transformative force for software development and is redefining how software is designed, developed, tested, deployed, and maintained. From AI-assisted coding and intelligent automation to advanced analytics and decision support, these technologies are accelerating innovation across the entire ICT sector. At the same time, they challenge us to rethink skills, ethics, security, and the way we create value for society. Our conference will provide opportunities to interact and network with presenters, experts, peers, and colleagues, as well as to participate in various discussions. The 34th International Conference on Software, Telecommunications and Computer Networks (SoftCOM 2026), technically co-sponsored by the IEEE Communications Society, will be held on September 17-19, 2026 in the beautiful city of Split located on the magnificent Croatian Adriatic coast. It will be our pleasure to meet you at the conference.

Welcome!

*Sinisa Krajnovic
Dinko Begusic*

TEHNIICAL PROGRAM CHAIRS MESSAGE

The 34th Conference on Software, Telecommunications and Computer Networks (SoftCOM 2026) will be held in Radisson Blu Resort hotel, Split, Croatia, September 17 to 19, 2026.

Researchers and experts from industry, research institutes and universities from 44 countries all around the world have prepared their submissions for presentation at SoftCOM 2026. Submitted papers have been peer reviewed by scientists from universities, institutes and ICT companies. The accepted papers have been carefully selected based on their contribution, relevance, conceptual clearness and overall quality.

The technical conference program features six general conference sessions, three special sessions and six symposia. The special sessions are dedicated to hot topics including: New Trends in Satellite and Space Communications and Navigation, AI-Enabled UAVs/UVs for On-Demand Edge Intelligence, Environmental Electromagnetic Compatibility, Advanced Educational Technologies, Ad Hoc&Sensor Networks and Internet of Things, and Smart Environments & Internet of Things.

Besides that a Business Forum will be organized featuring industrial panels and workshops with participation of managers, experts, professionals and institutions' representatives. The 25th Ericsson Nikola Tesla Summer Camp workshop provides the opportunity to students to promote their achievements and improve their innovations management skills.

On behalf of the Technical Program Committee we would like to thank and credit the authors for their excellent contributions. Particular thanks to the reviewers for their great job as well as to the IEEE Communications Society (ComSoc), Technical Committee of Communication Software for the support.

Technical Program Committee Co-chair

Pascal Lorenz

SoftCOM 2026 COMMITTEES

TECHNICAL PROGRAM COMMITTEE

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Sonia Ben Rejeb, ISI_University of Manar, Tunisia

Petar Solic, University of Split, Croatia

Tianhua Xu, Tianjin University, China

Toni Perkovic, University of Split, Croatia

Tony Bogovic, Perspecta Labs, USA

Zoran Blazevic, University of Split, Croatia

SoftCOM 2026 Conference Secretary

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UNIVERSITY OF SPLIT
FACULTY OF ELECTRICAL ENGINEERING,
MECHANICAL ENGINEERING AND NAVAL
ARCHITECTURE - FESB SPLIT

COMMUNICATIONS AND INFORMATION
SOCIETY, CROATIA (CCIS)

Under the auspices of:

CROATIAN ACADEMY OF ENGINEERING

Technically co-sponsored by:

IEEE COMMUNICATIONS SOCIETY
(COMSOC)

IEEE CROATIA SECTION

IEEE COMMUNICATIONS SOCIETY –
CROATIA CHAPTER

SoftCOM 2026 PROGRAM OUTLINE

Thursday, September 17, 2026 (Hotel Radisson Blu)

08:00 – 09:00 Registration

09:00 – 10:30 Technical program, Professional program, Business forum

10:30 – 11:00 Coffee break

11:00 – 12:30 Technical program, Professional program, Business forum

12:30 – 14:30 Lunch

14:30 – 16:00 Technical program, Professional program, Business forum

16:00 – 16:30 Coffee break

16:30 – 18:00 Technical program, Professional program, Business forum

Friday, September 18, 2026 (Hotel Radisson Blu)

08:00 – 09:00 Registration

09:00 – 10:30 Technical program, Professional program, Business forum

10:30 – 11:00 Coffee break

11:00 – 12:30 Keynote speech

12:30 – 14:30 Conference Luncheon

14:30 – 16:00 Technical program, Professional program, Business forum

16:00 – 16:30 Coffee break

16:30 – 18:00 Technical program, Professional program, Business forum

18:30 – 23:00 Social program

Saturday, September 19, 2026 (Hotel Radisson Blu)

08:30 – 10:00 Technical program, Professional program, Business forum

10:00 – 10:30 Coffee break

10:30 – 12:00 Technical program, Professional program, Business forum

12:30 – 15:00 Conference trip

KEYNOTE SPEAKER

KEYNOTE SPEECH

Friday, September 18, 11:00-12:30 (GRAND BALLROOM)

Adapting AI Agents for Telecom Networks: From Intent-Driven Management to Autonomous Operations

Zeljka Lemaster

Head of the AI Innovation and Incubation US, at Ericsson

Abstract: What happens when telecom networks stop waiting for instructions and start making decisions on their own?

Agentic AI introduces a new operating model where AI agents can perceive, reason, collaborate, and take actions with minimal human intervention. But autonomy in telecom requires more than intelligence; it requires trust, governance, interoperability, and domain expertise.

This keynote explores how the industry can bridge that gap and unlock a future where networks not only respond to change, but anticipate it, learn from it, and optimize themselves continuously. The biggest transformation may not be technological at all: humans shift from operating networks to defining intent, while trusted agents drive execution.



Zeljka Lemaster is the Head of the AI Innovation and Incubation US, at Ericsson. She holds a Master's degree in Computer Science from the University of Zagreb, Croatia. Prior to joining Ericsson, Zeljka held number leadership roles across Silicon Valley startups and mid-sized technology companies, where she led multidisciplinary teams of data scientists, software engineers, and product developers focused on building data-driven enterprise solutions powered by artificial intelligence, machine learning, and advanced analytics. At Ericsson, Zeljka leads strategic initiatives focused on applying emerging AI technologies to telecom networks and operations. Her most recent work spans the development of Autonomous Network solutions that leverage Telecom Foundation Models, domain-specific knowledge, and multi-agent AI systems to accelerate innovation across Ericsson's portfolio and deliver measurable value to communication service providers. Zeljka also leads AI ecosystem engagement efforts across North America and Silicon Valley, collaborating with technology leaders, startups, hyperscalers, research institutions, and open-source communities.

TECHNICAL PROGRAM: GENERAL CONFERENCE

Friday, September 18, 09:00-10:30 (RUŽMARIN)
S1: 5G & B5G TECHNOLOGIES

Chair: Giovanni Giambene (University of Siena, Italy)

Empirical Analysis of 4G/5G Connectivity and Latency on Czech Railway Corridors

Jan Kufa, Ladislav Polak, Ondřej Zelený and Tomas Fryza (Brno University of Technology, Czech Republic)

QoEVR: A Composite QoE Metric for Wireless VR with Network QoS and User-Role Sensitivity

Sulaimon Alaba Yusuf (Federal University of Lavras, Brazil); Ogobuchi Daniel Okey (Federal University of ABC (UFABC), Brazil); Renata Lopes Rosa (Federal University of Lavras, Brazil); Demostenes Zegarra Rodriguez (Federal University of Lavras & Nokia Technology Institute, Brazil)

DualPI2 Active Queue Management in ns-3: Implementation and Validation

Maria Eduarda Veras and Eduardo Freitas (Universidade Federal de Pernambuco, Brazil); Assis Tiago de Oliveira Filho (Universidade Federal de Pernambuco & GPRT Networking and Telecommunications Research Group, Brazil); Judith Kelner (UFPE, Brazil); Djamel Hadj Sadok (Federal University of Pernambuco, Brazil)

eBPF-Based TEID-Aware GTP-U Telemetry for Containerized Edge O-RAN xHaul

Abu Bakar Rana (CNIT, Italy & CNIT, Italy); Francesco Paolucci and Filippo Cugini (CNIT, Italy); Juan José Vegas Olmos (NVIDIA Corporation, Israel); Piero Castoldi (Scuola Superiore Sant'Anna, Italy)

Fuzzy-Based Vertical Handover Scheme for Federated GOVSATCOM Systems

Hoang Trung Le and Giovanni Giambene (University of Siena, Italy); Jorge Baranda (Centre Tecnològic de Comunicacions de Catalunya (CTTC/CERCA), Spain); Marc Carrascosa-Zamacois (Centre Tecnològic de les Comunicacions de Catalunya, Spain); Eddi Gonzalez Aular (Hispatat, Spain); Julio Modrego Gil (INDRA, Italy)

Friday, September 18, 09:00-10:30 (KAKTUS)
S2: NETWORK OPERATIONS AND MANAGEMENT

Chair: Joško Radić (University of Split, Croatia)

RAG-Empowered LLM-Driven Proactive Radio Resource Management for O-RAN

Onur Salan (Communications and Signal Processing Research (HISAR) Laboratory, TÜBİTAK BİLGEM, Turkey & Istanbul Technical University, Turkey); Burak Çırağ (Istanbul Technical University, Turkey); Onur Sever (Communications and Signal Processing Research (HISAR) Lab TUBITAK BILGEM, Turkey & Ozyegin University, Turkey); Ibrahim Hokelek (Tubitak Bilgem, Turkey); Ali Gorcin (Istanbul Technical University, Turkey); Hakan A. Çirpan (Istanbul Technical University, Turkey)

Topology-Aware Resource Allocation for VNE

Amir Javadpour (Ictficial, Finland); Forough Ja'fari (Sharif University of Technology, Iran); Tarik Taleb (Ruhr University Bochum, Germany)

Rule-Aware VNE for SDN Resource Management

Amir Javadpour (Ictficial, Finland); Forough Ja'fari (Sharif University of Technology, Iran); Tarik Taleb (Ruhr University Bochum, Germany); Masoud Shokmehzad (Ictficial Oy, Finland)

A Flow-Level Controlled Dual-WAN Architecture for Session Preservation and Adaptive Quality Selection in VoIP Networks

Yuma Nishimura and Toshikazu Nishimura (Ritsumeikan University, Japan)

Reserve-Aware Buffer Control for QoS Support in Satellite-Assisted QKD Networks

Filip Lauterbach (VŠB-TUO, Czech Republic); Michal Vanek (VSB - Technical University of Ostrava, Czech Republic); Miralem Mehic (University of Sarajevo, Bosnia and Herzegovina); Miroslav Voznak (VSB - Technical University of Ostrava, Czech Republic)

Mobility Patterns in a Large-Scale Public Wi-Fi Network from Privacy-Preserving DHCP Logs

Gianluca Mazzini (University of Ferrara, Italy)

Characterizing Fairness Trade-offs in Multi-Client Adaptive Streaming

André Luiz Silva de Moraes (Federal University of Santa Catarina, Brazil & Federal Institute of Santa Catarina, Brazil); Douglas D J Macedo (Federal University of Santa Catarina, Brazil)

Friday, September 18, 14:30-16:00 (RUŽMARIN)
S3: AI IN SOFTWARE DEVELOPMENT

Chair: Linda Vicković (University of Split, Croatia)

A Multi-LLM Framework for Confidence-Aware User Story Classification

Carlos Eduardo Meneses de Souza (UFCG, Brazil); Emanuel Dantas (VIRTUS, Brazil); Mirko Perkusich (VIRTUS-UFCG, Brazil); Danylo Wagner Albuquerque (UFCG & Intelligent Software Engineering Group, Brazil); Ademar França De Sousa Neto (UFCG, Brazil); Kyller Costa Gorgônio and Angelo Perkusich (Federal University of Campina Grande, Brazil)

Software Team Formation Research: A Longitudinal Analysis

Emanuel Dantas (VIRTUS, Brazil); Ademar França De Sousa Neto (UFCG, Brazil); Mirko Perkusich (VIRTUS-UFCG, Brazil); Danylo Wagner Albuquerque (UFCG & Intelligent Software Engineering Group, Brazil); Alexandre Costa (Federal University of Campina Grande, Brazil); Eduardo Simões (UFAL, Brazil); Evandro Costa (UFAL-Universidade Federal de Alagoas, Brazil); Kyller Costa Gorgônio and Angelo Perkusich (Federal University of Campina Grande, Brazil)

Prompting GPT-5 on Scrum Certification Questions: An Empirical Accuracy Study

Mirko Perkusich (VIRTUS-UFCG, Brazil); Danylo Wagner Albuquerque (UFCG & Intelligent Software Engineering Group, Brazil); João Paiva and Robson Vilar (UFCG, Brazil); Emanuel Dantas (VIRTUS, Brazil); Ademar França De Sousa Neto (UFCG, Brazil); Kyller Costa Gorgônio and Angelo Perkusich (Federal University of Campina Grande, Brazil)

Saturday, September 19, 08:30-10:00 (RUŽMARIN)

S4: AI/ML METHODS AND APPLICATIONS

Chair: Danylo Wagner Albuquerque (Federal University of Campina Grande, Brazil)

Towards a Neuro-Symbolic Architecture for Trustworthy Cultural Heritage Question Answering

Martin Kuzman, and Krunoslav Žubričić (University of Dubrovnik, Croatia); Marko Horvat (University of Zagreb, Croatia)

Evaluating Prompting Strategies in PMP-Style Certification Questions with GPT

Pedro Ivo Leite (IFPB, Brazil); João Paiva (UFCG, Brazil); Danylo Wagner Albuquerque (UFCG & Intelligent Software Engineering Group, Brazil); Mirko Perkusich (VIRTUS-UFCG, Brazil); Angelo Perkusich (Federal University of Campina Grande, Brazil)

A Comparative Study of Prompting Strategies for LLM-Guided SQL Query Optimization

Daniel Costa (IFPB, Brazil); Danylo Wagner Albuquerque (UFCG & Intelligent Software Engineering Group, Brazil); Bruno Moreno (IFPB, Brazil); Emanuel Dantas (VIRTUS, Brazil); Ademar França De Sousa Neto (UFCG, Brazil); Mirko Perkusich (VIRTUS-UFCG, Brazil); Kyller Costa Gorgônio and Angelo Perkusich (Federal University of Campina Grande, Brazil)

Input data preprocessing in landslide segmentation using deep neural networks

Kseniia Ikonnikova, Marko Subasic and Juraj Petrovic (University of Zagreb, Croatia); Vlatko Gulam (Croatian geological survey, Croatia); Davor Pollak (Hrvatski geološki institut, Croatia); Mario Tropčić (University of Zagreb, Croatia)

ROAD-E: Edge-Based Real-Time Anomaly Detection for ODD-Oriented Vehicle Testing

Daniel Kraus (Pro2Future GmbH, Austria); Amel Jelidi (Pro2Future GmbH, Austria & Graz University of Technology, Austria)

Hierarchical Deep Reinforcement Learning for S-Curve Trajectory Control and Goal-based Decision Making in Autonomous Driving

Jay Trivedi and Nitin Singh Rajput (Pandit Deendayal Energy University, Gandhinagar, India)

Friday, September 18, 09:00-10:30 (PALMA)

S5: DATA PROCESSING

Chair: Vassilis G. Kaburlasos (International Hellenic University, Greece)

Agricultural Time-Series Forecasting Using a Type 1 Neural Network (T1NN)

Christoforos Panagiotoudis and Vassilis G. Kaburlasos (International Hellenic University, Greece)

An Adaptive Temporal Multimodal Fusion Algorithm for Data Capture and Analysis in Virtual Reality Systems

David Augusto Ribeiro (UFLA, Brazil); Francisco Elias Rodriguez Novoa (National University of Trujillo, Peru); Muhammad Saadi (Nottingham Trent University, United Kingdom (Great Britain)); Renata Lopes Rosa; Demosthenes Zegarra Rodriguez (Universidade Federal de Lavras, Brazil)

Risk Aware Adaptive Scheduling Between In-Memory and Disk-Based Big Data Frameworks

Mallikharjuna Rao K, Aryan Bramhe, Anuj Patil and Pranjal Sharma (IIIT Naya Raipur, India)

SemDriftBD: Distributed Semantic Drift Detection in Large-Scale Text Streams

Bandi Sai Vikas, J Jaya Surya, Chaitanya Krishna Bypuneni and Mallikharjuna Rao K (IIIT Naya Raipur, India)

Towards Predictive Estimation of Coefficients in a Single-Index Asset Return Model

Marko Miljković and Stjepan Begušić (University of Zagreb, Croatia)

Thursday, September 17, 9:00-10:30 (KAKTUS)

S6: SPEECH AND ACOUSTIC SIGNAL PROCESSING

Chair: Branko Žitko (University of Split, Croatia)

Lightweight CNN for Musical Instrument Recognition

Peter Simeon Klunda, Maroš Jakubec, Roman Jarina and Peter Kasák (University of Zilina, Slovakia)

Evaluating Speaker Verification on VoxAging: A Longitudinal Data-Centric Study

Adam Lukáč, Roman Jarina, Maroš Jakubec and Peter Kasák (University of Zilina, Slovakia)

Benchmarking ASR Models on Croatian Spoken Numbers

Lucija Bročić and Branko Žitko (University of Split, Croatia)

Speaker-Independent Classification of Croatian Spoken Arithmetic Tokens Using Linear Models

Mia Jadrić, Jakša Janković, Mate Elez, Sara Romac, Matea Vučemić-Vranjić and Branko Žitko (University of Split, Croatia)

Thursday, September 17, 9:00-10:30 (RUŽMARIN)

S7: AI/ML BASED IMAGE PROCESSING

Chair: Sven Gotovac (University of Split, Croatia)

A Crown-Aware Framework for Cross-Plot Forest Defoliation Estimation from Hyperspectral Data

Shafiuallah Soomro and Arianit Kurti (Linnaeus University, Sweden)

Adaptive Spectral-Texture Descriptor for Efficient Maize Disease Detection in Resource-Constrained Agricultural Environments

Ugochukwu Okwudili Matthew (Universidade Federal de Lavras, Brazil); Francisco Elias Rodriguez Novoa (National University of Trujillo, Peru); Muhammad Saadi (Nottingham Trent University, United Kingdom (Great Britain)); Renata Lopes Rosa, and Demostenes Zegarra Rodriguez (Federal University of Lavras, Brazil)

YOLOv11x with CBAM and Focal Loss for Six-Class Coffee Cherry Maturity Detection

Jimmy Robert Ccama Ccaña (Universidade Federal de Lavras, Brazil); Demostenes Zegarra Rodriguez (UFLA, Brazil); Renata Lopes Rosa (Universidade Federal de Lavras, Brazil)

GPU-Accelerated Vessel Tracking Using NVIDIA DeepStream with NvDeepSORT and Re-Identification

Nediljko Bugarin (University of Split, Croatia); Sven Gotovac (University of Split & FESB, Croatia)

Vehicle Control in CARLA Simulator via Hand Gesture Recognition Using a Webcam

Robert Pavić (TTTech Auto LLC, Croatia); Marijan Herceg (Josip Juraj Strossmayer University of Osijek, Croatia); Mario Vranjes (University of Osijek, Croatia); Ratko Grbić (University of Osijek, Faculty of Electrical Engineering, Croatia)

Driver Emotion Recognition in Automotive Applications Using In-Vehicle Camera

Filip Fekete (TTTech Auto LLC, Croatia); Marijan Herceg (FERIT, Croatia); Ratko Grbić (University of Osijek, Faculty of Electrical Engineering, Croatia); Mario Vranjes (University of Osijek, Croatia)

Saturday, September 19, 08:30-10:00 (KAKTUS)

S8: AI/ML APPLICATIONS IN BIOMEDICINE

Chair: Matko Šarić (University of Split, Croatia)

Machine Learning for Tremor Detection in Parkinson's and Essential Tremor Using Wearables

Sara Bruschi (Università Politecnica delle Marche, Italy); Marco Esposito, Sara Raggiunto and Luisiana Sabbatini (Università Politecnica Delle Marche, Italy); Alberto Belli and Paola Pierleoni (Università Politecnica delle Marche, Italy)

Edge AI for Parkinson's Disease Monitoring: A Task-Aware Data Reduction Approach

Andrea Procopio (Massachusetts Institute of Technology, USA); Marco Esposito (Università Politecnica Delle Marche, Italy); Sara Bruschi (Università Politecnica delle Marche, Italy); Sara Raggiunto (Università Politecnica Delle Marche, Italy); Alberto Belli and Paola Pierleoni (Università Politecnica delle Marche, Italy)

A Hybrid DenseNet-SVM Approach for EEG-Based Emotion Recognition

Douglas Silva (Universidade Federal de Lavras, Brazil); Vinicius Vitor dos Santos Dias and Mariele Jordane da Silva (UFLA, Brazil); Renata Lopes Rosa (Universidade Federal de Lavras, Brazil); Demostenes Zegarra Rodriguez (Federal University of Lavras & Nokia Technology Institute, Brazil)

Automated Dental Pathology Segmentation via a Microservices AI Architecture

Gabriel Mihali (Babeş-Bolyai University, Romania);
Camelia Florina Andor (Babeş-Bolyai University, Romania)

PoreMap: Unlocking High-Throughput Raw Nanopore Signal Mapping with Near-Memory Processing

Tianqi Zhang (University of California, San Diego, USA); Minxuan Zhou (Illinois Institute of Technology, USA); Niema Moshiri and Tajana Rosing (University of California, San Diego, USA)

SPECIAL SESSIONS AND SYMPOSIA

**SS1: SPECIAL SESSION ON NEW TRENDS
IN SATELLITE AND SPACE
COMMUNICATIONS AND NAVIGATION**

Thursday, September 17, 16:30-18:00 (PALMA)

**SS1: SPECIAL SESSION ON NEW TRENDS IN
SATELLITE AND SPACE COMMUNICATIONS AND
NAVIGATION**

Chair: Roberto Garelo (Politecnico di Torino, Italy)

**Integrated Sensing, Communication, and
Navigation in LEO Space Networks**

Giorgio Taricco (Politecnico di Torino, Italy)

**Rate-Compatible SC-LDPC Coding for Deep-
Space Telemetry in Jammed Environments**

Massimo Battaglioni, Rebecca Giuliani, Mauro Michele Maria Costantino and Franco Chiaraluce (Università Politecnica delle Marche, Italy)

**Uninterrupted communication in LEO networks
using soft handover with imperfect CSI**

Houcem Ben Ben Salem (Politecnico di Torino, Italy); Alberto Tarable (National Research Council, Italy); Alessandro Nordio (CNR-IEIT, Italy); Behrooz Makki (Ericsson Research, Sweden)

**CRC-Assisted MRB Post-Processing for Error-
Floor Reduction in CCSDS Turbo Codes**

Alberto G. Perotti (Politecnico di Torino, Italy); Mohammad Mahdi Assaf (Telecom Paris, France); Roberto Garelo (Politecnico di Torino, Italy)

**Influence of the Ground Surface Type on Ultra-
Wideband Positioning Accuracy of a Nano UAV**

Mario Muštra, Luka Kramarić, and Goran Pažin (University of Zagreb, Croatia)

**User Scheduling with Hybrid Beamforming
Architectures for SDM-based LEO Non-
Terrestrial Networks**

Daniel Gaetano Riviello, and Nicolò Benso (Politecnico di Torino, Italy)

**Analog and Digital Signal Processing for
Coherent Optical Satellite Uplinks**

Stella Civelli (CNR-IEIT, Italy); Marco Secondini (Scuola Superiore Sant'Anna, Italy); Luca Potì (Consorzio Nazionale Interuniversitario per le Telecomunicazioni, Italy)

**Design and Implementation of a System for
Emulating Space Communication Conditions in
Analog Missions**

Zbyněk Kocur, and Ondrej Vondrouš (Czech Technical University in Prague, Czech Republic)

**SS2: SPECIAL SESSION ON AI-ENABLED
UVs/UAV FOR ON-DEMAND EDGE
INTELLIGENCE**

Thursday, September 17, 14:30-16:00 (PALMA)

**SS2: SPECIAL SESSION ON AI-ENABLED UVs/UAV
FOR ON-DEMAND EDGE INTELLIGENCE**

Chair: Giovanni Giambene (University of Siena, Italy)

**Low Bit-Rate Learning by UAV Networks for
Environmental Monitoring**

Marco Carpentiero (University of Salerno, Italy); Riccardo Zambon and Phuc Tinh Vo (University of Siena, Italy); Paolo Addesso (University of Salerno, Italy); Giovanni Giambene (University of Siena, Italy); Vincenzo Matta (University of Salerno, Italy)

**Multi-RAT Throughput-Based Mapping and
Trajectory Planning for Mobile Robots**

Pietro Spadaccino (La Sapienza Università di Roma, Italy); Giuseppe Baruffa and Luca Rugini (University of Perugia, Italy); Antonia Tulino (Università degli Studi di Napoli, Italy & New York University, USA); Paolo Banelli (University of Perugia, Italy); Sergio Barbarossa (Sapienza University of Rome, Italy)

**Real-Time Digital Twin for UAV Telemetry
Monitoring and Closed-Loop Control over
Cellular Networks**

Nicola Garau (University of Trento, Italy); Giovanni Giambene (University of Siena, Italy); Fabrizio Granelli (University of Trento, Italy); Phuc Tinh Vo and Riccardo Zambon (University of Siena, Italy)

Multi-Agent Reinforcement Learning for SLA-Aware Network Slicing in UAV-Enabled MEC

Mohammad Farhoudi (University of Oulu, Finland); Zeinab Sasan (Amirkabir University of Technology, Iran); Masoud Shokrnezhad (Ictficial Oy, Finland); Tarik Taleb (Ruhr University Bochum, Germany)

UAV Privacy-Preserving in 6G Non-Terrestrial Networks under Traffic Analysis Threats

Huw T Whitworth and Al-Rubaye Saba (Cranfield University, United Kingdom (Great Britain))

SS3: SPECIAL SESSION ON ENVIRONMENTAL ELECTROMAGNETICS COMPATIBILITY

Thursday, September 17, 11:00-12:30 (AGAVA)

SS3: SPECIAL SESSION ON ENVIRONMENTAL ELECTROMAGNETICS COMPATIBILITY

Chair: Dragan Poljak (University of Split, Croatia)

Gaussian Process Regression Surrogate Model for Uncertainty Quantification of Absorbed Power Density in 1-layer Planar Skin

Anna Šušnjara Nejašmić, and Dragan Poljak (University of Split & FESB, Croatia)

A Note on the Calculation of the Power Loss and Leakage Current in the vicinity of the Horizontal Grounding Electrode

Dragan Poljak (University of Split, Croatia)

Influence of Human Body Posture on Induced Current Density Under Uniform Low Frequency Magnetic Field Exposure

Mario Cvetković (University of Split, Croatia); Dragan Poljak (University of Split, FESB, Croatia); Hrvoje Dodig (University of Split, Faculty of Maritime Studies & Naval Electronic Center, PCE, Croatia)

SS4: SPECIAL SESSION ON ADVANCED EDUCATIONAL TECHNOLOGIES

Saturday, September 19, 10:30-12:00 (PALMA)

SS4: SPECIAL SESSION ON ADVANCED EDUCATIONAL TECHNOLOGIES

Chair: Angelina Gašpar (University of Split, Croatia)

From a Digital Twin to Physical Plant: A Mixed Reality Multitank Experiment in an Intelligent Control Systems Course

Armin Remenyi and Saleh Ragheb Saleh Alsaleh (Tallinn University of Technology, Estonia); Aleksei Tepljakov (Tallinn University of Technology & R8 Technologies OÜ, Estonia); Eduard Petlenkov and Vladimir Kuts (Tallinn University of Technology, Estonia)

Research and Design of a Multi-Agent Adaptive Cyber Range

Lucian-Daniel Jimon and Mircea Vaida (Technical University of Cluj-Napoca, Romania)

Competency-Oriented Learning in International Project-Based Software Engineering Education

Birgit Pohn (University of Applied Sciences Technikum Wien, Austria & Medical University Graz, Austria); Lars Mehnen (Technikum Wien, Austria); Samuil Angelov (Fontys University of Applied Sciences, The Netherlands)

Supporting Individualized Learning Paths in eHealth Through a Competency-Based Meta-Framework

Birgit Pohn (University of Applied Sciences Technikum Wien, Austria & Medical University Graz, Austria); Lukas Rohatsch (University of Applied Sciences Technikum Wien, Austria); Matthias Frohner, Lilly Maria Tremel, Alireza Mosadegh Manshadi and Stefan Sauermann (University of Applied Sciences Technikum Wien, Austria)

When Correct Isn't Enough: A Cognitive Load Theory Critical Analysis for AI Tutor Responses

Rachel Van Campenhout, Jeffrey S. Dittel, and Benny G Johnson (VitalSource, USA)

SS5: SPECIAL SESSION ON SMART ENVIRONMENTS AND INTERNET OF THINGS

Thursday, September 17, 11:00-12:30 (KAKTUS)

SS5: SPECIAL SESSION ON SMART ENVIRONMENTS AND INTERNET OF THINGS

Chair: Maja Stella (University of Split, Croatia)

Experimental Analysis of Wi-Fi CSI and Channel Impulse Response Reconstruction in Industrial Environments

Ahmed-Zakaria Ghecham (Conservatoire National des Arts et Métiers, France); Hakim Adjedjou (Conservatoire Nationale Des Arts et Métiers- Paris, France); Michel Terré (CNAM, France); Lounis Zeroul (Conservatoire Nation Des Arts et Metiers, France); Iness Ahriz (CNAM, France); Nicolas Vasseur (Renault, France); Emilie Rondet (Verkor, France)

A Headless IoT Framework for Automated Road Traffic Monitoring with Machine Learning

Georgios Faltakas and George T. Karetzos (University of Thessaly, Greece); Fotios Gioulekas (Dept. of Digital Systems University of Thessaly, 5th Regional Health Authority, Greece)

An Edge-Intelligent Cybersecurity Architecture for Secure IoT Environmental Monitoring in High-Sensitivity Infrastructures

Hmoud Alsharji, Nayef Abusharia, Wadima Alyafei, Hamad Alkaabi and Mohamed Hadded (Abu Dhabi University, United Arab Emirates)

An IoT System for Real-Time Punching Bag Training Monitoring and Strike Analytics

Dunja Međurečan and Juraj Petrovic (University of Zagreb, Croatia)

Joint Offload Parameter and CPU Frequency Optimization for AUV-Assisted Underwater Computation Offloading

Amin Ebrahimzadeh (CoE MARBLE - Centre of Excellence in Maritime Robotics and Technologies for Sustainable Blue Economy, Croatia); Fausto Ferreira (University of Zagreb & CoE MARBLE - Centre of Excellence in Maritime Robotics and Technologies for Sustainable Blue Economy, Croatia); Barbara Arbanas Ferreira (CoE MARBLE - Centre of Excellence in Maritime Robotics and Technologies for Sustainable Blue Economy, Croatia)

SS6: SPECIAL SESSION ON AD-HOC & SENSOR NETWORKS AND INTERNET OF THINGS

Thursday, September 17, 09:00-10:30 (OLEANDAR)

SS6: SPECIAL SESSION ON AD-HOC & SENSOR NETWORKS AND INTERNET OF THINGS

Chair: Ante Kristić (University of Split, Croatia)

A Digital Twin-Driven Framework with Machine Learning Integration for Crop-Yield Prediction

Ayub Shah, Rawlings Ntassah and Fabrizio Granelli (University of Trento, Italy)

Temporal Successive Interference Cancellation for Multi-User Detection in Unslotted ALOHA-based Passive RFID Systems

Leonarda Pavlovski (University of Split, Croatia); Andrea Petroni (Fondazione Ugo Bordonì, Italy); Mauro Biagi (Sapienza University of Rome, Italy)

High-Performance Edge-Optimized Federated IDS through Dynamic Knowledge Transfer and Adaptive Loss-Temperature Control

Ogobuchi Daniel Okey (Federal University of ABC (UFABC), Brazil); Sajjad Dadkhah (University of New Brunswick (UNB), Canada); Demostenes Zegarra Rodriguez (Federal University of Lavras & Nokia Technology Institute, Brazil); João Henrique Kleinschmidt (Universidade Federal Do ABC, Brazil)

Two IoT Devices for E-monitoring Insect Pests

Armando Amore (Italy); Andrea Sciarretta (University of Molise, Italy); Theodore A. Tsiligiridis (Agricultural University of Athens, Greece)

A Modular Sensor Fusion Pipeline for Configurable Localization in Autonomous Systems

Tatsuki Ishikawa and Uljana Reinsalu (Tallinn University of Technology, Estonia); Aleksei Tepljakov (Tallinn University of Technology & R8 Technologies OÜ, Estonia)

Unsupervised Learning-Assisted In-Cave Wireless Network Planning Based on Real Measurement

Sara Ranjbaran (Aalto University, Finland); Arshiya Madadi (hahid Chamran University of Ahvaz, Iran); Mehdi Naderi Soorki and Arsalan Keyvanrad (Shahid Chamran University of Ahvaz, Iran)

SYM1/I: SYMPOSIUM ON NEXT GENERATION WIRED AND WIRELESS NETWORKS I

Thursday, September 17, 9:00-10:30 (PALMA)

SYM1/I: SYMPOSIUM ON NEXT GENERATION WIRED AND WIRELESS NETWORKS I

Chair: Pascal Lorenz (University of Haute Alsace, France)

Urban LTE/5G Coverage Analysis: HTZ Simulation and RTL-SDR Measurement Validation

David Legan and Iztok Humar (University of Ljubljana, Slovenia)

Urban Map-Aware Internet-of-Vehicle Wireless Network Deployment Using Unsupervised Learning

Sara Ranjbaran (Aalto University, Finland); Arsalan Keyvanrad (Shahid Chamran University of Ahvaz, Iran); Arshiya Madadi (hahid Chamran University of Ahvaz, Iran); Mehdi Naderi Soorki (Shahid Chamran University of Ahvaz, Iran)

Smart and Sustainable Networks: Congestion Forecasting and Traffic Orchestration Using Bayesian Deep Learning

Angela Voinea Ciocan (ESAIP, France); Adrian Ciocan (La Rochelle University, France); Sofiane Hamrioui (ESAIP, France); Vincent Courboulay (L3i - La Rochelle Université, France); Pascal Lorenz (University of Haute Alsace, France)

Calibrated Budget-Aware RF Frame Selection for Edge Wireless Systems

Angela Voinea Ciocan and Sofiane Hamrioui (ESAIP, France); Vincent Courboulay (L3i - La Rochelle Université, France); Adrian Ciocan (La Rochelle University, France); Pascal Lorenz (University of Haute Alsace, France)

Coexistence Analysis Between IMT Base Stations and FSS Earth Stations in the Upper 6 GHz Band

Marina Lotti and Valeria Petrini (Fondazione Ugo Bordon, Italy); Claudia Carciofi (Via Indipendenza 24, Italy); Manuel Faccioli (Fondazione Ugo Bordon, Italy)

LAPLACE: Payload-Aware Dynamic Precision Orchestration for Edge LLM Inference

Abu Bakar Rana (CNIT, Italy & CNIT, Italy); Lorenzo De Marinis (Scuola Superiore Sant'Anna, Italy); Francesco Paolucci (CNIT, Italy); Piero Castoldi (Scuola Superiore Sant'Anna, Italy); Filippo Cugini (CNIT, Italy)

SYM1/II: SYMPOSIUM ON NEXT GENERATION WIRED AND WIRELESS NETWORKS II

Saturday, September 19, 08:30-10:00 (PALMA)

SYM1/II: SYMPOSIUM ON NEXT GENERATION WIRED AND WIRELESS NETWORKS II

Chair: Pascal Lorenz (University of Haute Alsace, France)

FAOT: Federated Omni-Twin for Supply Chain Orchestration via HAPPO and Asymmetric Loss
Kartik Pandey, Keshav Prasad, Mallikharjuna Rao K and Aditya Nayak (IIIT Naya Raipur, India)

Content-Aware Video Quality Assessment in Lossy Environment

Janusz Henryk Klink (Wroclaw University of Science and Technology, Poland); Tadeus Uhl (Flensburg University of Applied Sciences, Germany)

HAPS-Supported Radio Access Network Resilience with Weather-Aware Modeling and Priority-Aware Strategies

Marco Cutarelli, Greta Vallero and Michela Meo (Politecnico di Torino, Italy)

End-to-End Network Slicing with Radio-Level QoS in a Fully Virtualized Kubernetes 5G Testbed

Elena-Ramona Modroiu, and Lukas Benjamin Roth and Johannes Maria Ruef (TU Berlin, Germany); Sharan Deepak Thakur (Fraunhofer FOKUS, Germany); Thomas Magedanz (Fraunhofer Institute FOKUS / TU Berlin, Germany)

Computationally Efficient Capacity Planning Method in 4G/5G Mobile Networks

Albert Mráz (John Von Neumann University, Hungary)

SYM2/II: SYMPOSIUM ON SECURITY AND DATA FORENSICS I

Thursday, September 17, 14:30-16:00 (KAKTUS)

SYM2/II: SYMPOSIUM ON SECURITY AND DATA FORENSICS I

Chair: Toni Perković (University of Split, Croatia)

Mitigating EDoS with Transfer Reinforcement Learning

Amir Javadpour (Ictficial, Finland); Forough Ja'fari (Sharif University of Technology, Iran); Chafika Benzaid (University of Oulu, Finland & University of Sciences and Technology Houari Boumediane (USTHB), Algeria); Tarik Taleb (Ruhr University Bochum, Germany); Fatih Turkmen (University of Groningen, The Netherlands)

Deep Learning-Based Malware Detection and Family Classification Using Byteplot Image Encoding

Omar Elalfy, Abdulkareem Salem, Abdelrahman Donia, Sultan Deaibes and Mohamed Hadded (Abu Dhabi University, United Arab Emirates)

An OSINT-Driven Framework for Adaptive Honeypot Deployment Using LLM-Guided Intelligence

Hayfaa Akeil, Afnan Majdi, Arwa Emad, Tala Ballout and Mohamed Hadded (Abu Dhabi University, United Arab Emirates)

Enhancing Operation Wisdom Logging solution utilizing different local LLMs for Security Anomaly Detection

Zoran Bosic, Tomislav Zitnik, Nikola Seletkovic and Dorijan Kos (Ericsson Nikola Tesla, Croatia)

GIF Content Moderation in Messaging Systems

Matko Šimić (Infobip, Croatia); Maria Ljubičić (Infobip d.o.o, Croatia); Andro Merćep (University of Zagreb, Croatia); Emanuel Lacić (Infobip, Croatia)

Privacy-Preserving Federated Multitask Multi-Output Learning for Device Identification and Intrusion Detection in IoT Networks

Ogobuchi Daniel Okey (Federal University of ABC (UFABC), Brazil); Sajjad Dadkhah (University of New Brunswick (UNB), Canada); Renata Lopes Rosa (Federal University of Lavras, Brazil); Demostenes Zegarra Rodriguez (UFPA, Brazil); João Henrique Kleinschmidt (Universidade Federal Do ABC, Brazil)

**SYM2/II: SYMPOSIUM ON SECURITY AND
DATA FORENSICS II**

Thursday, September 17, 16:30-18:00 (KAKTUS)

**SYM2/II: SYMPOSIUM ON SECURITY AND DATA
FORENSICS II**

Chair: Toni Perković (University of Split, Croatia)

**Real-time Intrusion Detection System for Digital
Twins in Industrial Control Systems**

Sahar Zamanian and Maria Kihl (Lund University, Sweden)

**Digital Twin-Based Intrusion Detection System
Using Deep Reinforcement Learning for DNS
Traffic Analysis**

Samia Saidane (CNIT, Italy); Panagiotis Gkonis (National Technical University of Athens, Greece); Fabrizio Granelli (University of Trento, Italy)

**Phase-Transition Analysis of Variance
Estimation in Evolving Clustering for IoT
Intrusion Detection**

Augusto Vicente (Universidade Federal de Minas Gerais, Brazil); Renata Lopes Rosa (Federal University of Lavras, Brazil); Frederico Gadelha Guimaraes (Universidade Federal de Minas Gerais, Brazil)

**Selective Delegation of Authentication Contexts
over WebRTC-Based Peer-to-Peer
Communication**

Koki Nakajima and Toshikazu Nishimura (Ritsumeikan University, Japan)

**A Dual-Engine Cascaded Authentication
Framework for Cancelable Fingerprints**

Manodya Induwari Weerasooriya Weerasooriyage and Dulakshin Pabasara Jayawardhana Geekiyanage (University of Agder, Norway & University of Ruhuna, Sri Lanka); Harsha S Gardiyawasam Pussewalage (University of Agder, Norway); K. Darshana Abeyrathna (Group Research & Development, DNV AS, Oslo, Norway)

**COVER-MTD: Learning-Guided DDoS Defense
for Edge-IoT**

Amir Javadpour (Ictficial, Finland); Forough Jafari (Sharif University of Technology, Iran); Chafika Benzaid (University of Oulu, Finland & University of Sciences and Technology Houari Boumediane (USTHB), Algeria); Tarik Taleb (Ruhr University Bochum, Germany)

**SYM2/III: SYMPOSIUM ON SECURITY AND
DATA FORENSICS III**

Friday, September 18, 16:30-18:00 (KAKTUS)

**SYM2/III: SYMPOSIUM ON SECURITY AND DATA
FORENSICS III**

Chair: Toni Perković (University of Split, Croatia)

**Secure Drone Surveillance under Adversarial
Conditions**

Ahmed Salah Tawfik Ibrahim (CNIT, Italy); Athanasios Boufis (University of Patras, Greece); Matteo Sandrucci (Scuola Superiore Sant'Anna, Italy); Francesco Paolucci and Filippo Cugini (CNIT, Italy); Kyriakos Vlachos (University of Patras, Greece)

**VEGAS: Verifiable and Efficient Group-based
secure Aggregation with Zero-Sum masking**

Madani Mohamed Mehdi and Yacine Khellal (ESI, Algeria); Jean-Paul Yacoub (Univ Polytechnique Hauts-De-France LAMIH, France); Youcef Imine (Univ Polytechnique Hauts-De-France LAMIH CNRS, France); Antoine Gallais (Univ Polytechnique Hauts-De-France LAMIH CNRS & INSA Hauts-De-France, France); Leila Hamdad (Ecole Supérieur d'Informatique, Algeria)

**Sovereignty Is Not Digitalization: A Bottleneck-
Aware Index for Comparing National Digital
Autonomy**

Gianluca Mazzini (University of Ferrara, Italy); Stefano Epifani (Digital Transformation Institute, Italy)

**ICARUS: Intelligence-driven Contextual
Assessment of Risks in Unseen Scenarios**

Ricardo Alves Oliveira (Universidade do Minho, Portugal); João Marco C. Silva (University of Minho, Portugal & INESC TEC, Portugal)

**A Web Interface for Colour Image
Steganography Using Bit Selection and Reading
Order as Keys**

Lucija Žužić (University of Rijeka, Croatia); Jonatan Lerga (University of Rijeka - Tehnički Fakultet, Croatia); Renato Filjar (University of Rijeka, Croatia)

**Post-Quantum Cryptography for Secure V2X
Communications in Intelligent Transportation
Systems**

Sihem Baccari and Mohamed Hadded (Abu Dhabi University, United Arab Emirates)

TIMETABLE A			
Thursday, September 17 (Hotel Radisson Blu)			
Time/Hall	KAKTUS	RUŽMARIN	PALMA
8:00-9:00	REGISTRATION		
9:00-10:30	S6: Speech and Acoustic Signal Processing	S7: AI/ML based Image Processing	SYM1/I: Symposium on Next Generation Wired and Wireless Networks I
10:30-11:00	Coffee Break		
11:00-12:30	SS5: Special Session on Smart Environments and Internet of Things	CONTEL I	SYM4: Symposium on Green Networking and Computing
12:30-14:30	Lunch		
14:30-16:00	SYM2/I: Symposium on Security and Data Forensics I	CONTEL II	SS2: Special Session on AI-Enabled UVS/UAV for On-Demand Edge Intelligence
16:00-16:30	Coffee Break		
16:30-18:00	SYM2/II: Symposium on Security and Data Forensics II	CONTEL/ CEEPUS	SS1: Special Session on New Trends in Satellite and Space Communications and Navigation
Friday, September 18 (Hotel Radisson Blu)			
Time/Hall	KAKTUS	RUŽMARIN	PALMA
08:00-09:00	REGISTRATION		
09:00-10:30	S2: Network Operations and Management	S1: 5G & B5G Technologies	S5: Data Processing
10:30-11:00	Coffee Break		
11:00-12:30	Keynote speech: Z. Lemaster: Adapting AI Agents for Telecom Networks: From Intent-Driven Management to Autonomous Operations (GRAND BALLROOM)		
12:30-14:30	Conference Luncheon		
14:30-16:00	W1: Workshop on Information Security and Intellectual Property (KAKTUS)	S3: AI in Software Development (RUŽMARIN)	
16:00-16:30	Coffee Break		
16:30-18:00	SYM2/III: Symposium on Security and Data Forensics III (KAKTUS)		CONTEL / COBCOM I (RUŽMARIN)
18:30-23:00	Social program		
Saturday, September 19 (Hotel Radisson Blu)			
Time/Hall	KAKTUS	RUŽMARIN	PALMA
08:30-10:00	S8: AI/ML Applications in Biomedicine	S4: AI/ML Methods and Applications	SYM1/II: Symposium on Next Generation Wired and Wireless Networks II
10:00-10:30	Coffee Break		
10:30-12:00	WICT: Workshop on Information and Communications Technologies	CONTEL / COBCOM II	SS4: Special Session on Advanced Educational Technologies
12:30-15:00	Conference trip		

TIMETABLE B		
Thursday, September 17 (Hotel Radisson Blu)		
Time/Hall	OLEANDAR	AGAVA
08:30-09:00	REGISTRATION	
09:00-10:30	SS6: Special Session on Ad-Hoc & Sensor Networks and Internet of Things	Tutorial T1: D. Poljak, and M. Cvetković
10:30-11:00	Coffee Break	
11:00-12:30	WEDIH	SS3: Special Session on Environmental Electromagnetics Compatibility (EEMC)
12:30-14:30	Lunch	
14:30-16:00	SYM3/I: Symposium on Robotics and ICT Assisted Wellbeing I	Tutorial T2: M. Cavagnaro, and K. Vidjak
16:00-16:30	Coffee Break	
16:30-18:00	SYM3/II: Symposium on Robotics and ICT Assisted Wellbeing II (OLEANDAR)	
Friday, September 18 (Hotel Radisson Blu)		
Time/Hall	OLEANDAR	AGAVA
8:00-9:00	REGISTRATION	
9:00-10:30	WFIRE	Workshop on Computer Vision and Artificial Intelligence in Fruit Cultivation
10:30-11:00	Coffee Break	
11:00-12:30	Keynote speech: Z. Lemaster: Adapting AI Agents for Telecom Networks: From Intent-Driven Management to Autonomous Operations (GRAND BALLROOM)	
12:30-14:30	Conference Luncheon	
14:30-16:00		
16:00-16:30	Coffee Break	
16:30-18:00	ERICSSON NIKOLA TESLA SUMMER CAMP 2026 WORKSHOP (OLEANDAR)	
18:30-23:00	Social program	
Saturday, September 19 (Hotel Radisson Blu)		
Time/Hall	OLEANDAR	AGAVA
08:30-10:00	Towards a Shared Excellence Hub (AGAVA)	
12:30-15:00	Conference trip	

**SYM3/I: SYMPOSIUM ON ROBOTICS AND
ICT ASSISTED WELLBEING I**

**Thursday, September 17, 14:30-16:00
(OLEANDAR)**

**SYM3/I: SYMPOSIUM ON ROBOTICS AND ICT
ASSISTED WELLBEING I**

Chair: Mirjana Bonković (University of Split, Croatia)

**Interpretable Machine Learning for ESG Score
Prediction**

Zoi Kasapi, Eleni Vrochidou and George A Papakostas (Democritus University of Thrace, Greece)

**Flying on the Edge: A Survey of Time-Critical
FPGA-Enabled Neural Networks for Vision and
Obstacle Avoidance Applications**

Sebastian Karl Mladen Haupt, Marina Prvan, Josip Music, Arijana Burazin Mišura and Vesna Pekic (University of Split, Croatia)

**Cumulative Excess Feature Augmentation for
Cross-Bearing RUL Prediction**

Goran Josifovski (St. Cyril and Methodius University, Macedonia, the former Yugoslav Republic of); Zoran Hadzi-Velkov (Ss. Cyril and Methodius University in Skopje, Macedonia, the former Yugoslav Republic of); Marija Koleva (Makstil, Macedonia, the former Yugoslav Republic of)

**LSTM Forecasting of Photovoltaic Production
and Its Impact on Energy Balance in an Off-Grid
Microgrid**

Tea Erceg, Ivan Marasović, and Ana Kuzmanić Skelin (University of Split & FESB, Croatia)

**SOPHIA: A Student-Oriented Proactive Helper
for Intelligent Assistance**

Pavlina Mitsou, Zoi Kasapi, Eleni Vrochidou and George A Papakostas (Democritus University of Thrace, Greece)

**Humanized AI in Personalized Marketing: Virtual
Influencers and Synthetic Salespeople**

Ivan Torbica, Robert Rozić, and Robert Slišković (University of Mostar, Bosnia and Herzegovina)

**SYM3/II: SYMPOSIUM ON ROBOTICS AND
ICT ASSISTED WELLBEING II**

**Thursday, September 17, 16:30-18:00
(OLEANDAR)**

**SYM3/II: SYMPOSIUM ON ROBOTICS AND ICT
ASSISTED WELLBEING II**

Chair: Mirjana Bonković (University of Split, Croatia)

**WellBeat: Serverless Cardiovascular Risk
Stratification Integrating ApoB and
Environmental Stressors**

Arman Khatamsaz (Polytechnic Institute of Turin, Italy); Alex Duchaine and Ehsan Nikpey (Politecnico di Torino, Italy); Guido Pagana (LINKS Foundation & Politecnico of Turin, Italy); Giorgia Riba (Mutuaprivata, Italy)

**Edge-Oriented HRV Signal Processing for ICT-
Supported Wellbeing Monitoring from Wearable
Cardio Signals**

Galya Georgieva-Tsaneva (Bulgarian Academy of Science, Bulgaria); Yoan-Aleksandar Tsanev (Technical University of Varna, Bulgaria)

**Risk-Sensitive Reinforcement Learning-based
Policy for Medical Microrobot in Aortic Stenosis
Surger**

Sara Ranjbaran (Aalto University, Finland); Seyed Ali Mousavi Fard, Mehdi Naderi Soorki and Seyyed Sajjad Moosapour (Shahid Chamran University of Ahvaz, Iran)

**Benchmarking Explainable AI Algorithms in
OCD MRI Neuroimaging**

Seraphim Moumgiakmas (International Hellenic University, Greece); Zoi Kasapi, Eleni Vrochidou and George A Papakostas (Democritus University of Thrace, Greece)

**Design and Initial Experimental Validation of an
Agricultural Robot for Weed Control for Small-
Scale Operation**

Stipe Jurković and Josip Music (University of Split, Croatia)

**CLIP-Based Zero-Shot Olive Ripeness
Assessment and Robotic Sorting**

Mirjana Bonkovic, and Ivona Mlinarević (University of Split, Croatia)

**Preparation of a training image database with
the aim of improving the detection of small
objects in the natural environment**

Josip Music, Toma Sikora, Stanko Kruzic, and Vladan Papic (University of Split, Croatia)

**SYM4: SYMPOSIUM ON GREEN
NETWORKING AND COMPUTING**

Thursday, September 17, 11:00 - 12:30 (PALMA)

**SYM4: SYMPOSIUM ON GREEN NETWORKING
AND COMPUTING**

Chair: Josip Lorincz (University of Split, Croatia)

**An Empirical Study of Compute Platform
Influence on 5G gNB Performance and Energy
Efficiency Using srsRAN**

Elena-Ramona Modroiu (Technische Universität Berlin, Germany); Sharan Deepak Thakur (Fraunhofer FOKUS, Germany); Kushagra Mishra (Technische Universität Berlin, Germany); Thomas Magedanz (Fraunhofer Institute FOKUS / TU Berlin, Germany)

**ML-based Non-intrusive TCO Optimization for
Media Microservices**

Gang Shen (Intel, USA); Bin Li (Intel Labs, USA); Gustavo Malkomes (Lila Sciences, USA); Christian Maciocco (Intel Corp., USA); Hassnaa Moustafa (Intel Corporation, USA); Ravishankar Iyer (Intel Corp, USA)

**Online Regret-Minimizing Policy for Cooperative
Task Outsourcing in Edge-IoT Networks**

Sara Ranjbaran (Aalto University, Finland); Michele Nitti (University of Cagliari, Italy); Mehdi Naderi Soorki (Shahid Chamran University of Ahvaz, Iran)

**Power and Temperature Modeling of Raspberry
Pi**

Filip Idzikowski, Krzysztof Klimaszewski, and Bartosz Witkowski (Poznan University of Technology, Poland)

CONTEL SESSION I

**Thursday, September 17, 11:00-12:30
(RUŽMARIN)**

SYM5/I: CONTEL SYMPOSIUM I

Chairs: Mario Kušek, Marin Vuković (University of Zagreb, Croatia)

**GenAI-Driven Approach to IoT Cybersecurity
Supply Chain Analysis**

Nenad Petrovic (University of Nis, Serbia); Dragana Krstic and Dario Javor (University of Niš, Serbia); Mariusz Glabowski and Michał Weissenberg (Poznan University of Technology, Poland); Zoran Popovic (Higher Technical School of Professional Studies Zvečan, Serbia)

**Security Testing of the Water Network and IoT
Devices**

Josip Mrakovčić, and Marin Vukovic (University of Zagreb Faculty of Electrical Engineering and Computing, Croatia)

**Empirical Comparison of Centralized and
Federated Learning for Intrusion Detection on
Unseen Domains**

Ana P Jukić, Ivan Sičić, Ivana Podnar Zarko and Martina Antonic (University of Zagreb, Croatia)

**Privacy-Preserving Automatic Speech
Recognition using CKKS Homomorphic
Encryption**

Dumitru-Cosmin Melinte and Mircea Giurgiu (Technical University of Cluj-Napoca, Romania)

**Soft-Gated Multi-Representation Learning for
Secure Voice Authentication**

Florica Dolca and Mircea Giurgiu (Technical University of Cluj-Napoca, Romania)

CONTEL SESSION II

**Thursday, September 17, 14:30-16:00
(RUŽMARIN)**

SYM5/II: CONTEL SYMPOSIUM II

Chairs: Maja Matijašević (University of Zagreb, Croatia), Erich Leitgeb (University of Technology, Graz, Austria)

**Scenario-Based Communication Architectures
for Maritime IoT Buoy Networks**

Magdalena Simunec and Mario Kusek (University of Zagreb, Croatia)

**Intelligent Soil Monitoring and Smart Irrigation
System for Tobacco Cultivation**

Remzije Sulejmanoska, Jr (University of Tetovo, Macedonia, the former Yugoslav Republic of); Festim Halili (State University of Tetovo, Macedonia, the former Yugoslav Republic of); Merita-Kasa Halili (State University of Tetovo, the Former Yugoslav Republic of Macedonia)

**Evaluation and Integration of Croatian Speech
Technologies in a Prototype Virtual Assistant**

Renato Soic (University of Zagreb, Croatia); Zeljka Car (University of Zagreb Faculty of Electrical Engineering and Computing, Croatia); Ivo Majerski (Croatian Regulatory Authority for Network Industries, Croatia); Josip Goluža (University of Zagreb, Croatia)

Detection of Anomalous Player Behavior in FPS Games by Analyzing Records

Lukas Kraljić, Antonia Žaja and Magdalena Simunek (University of Zagreb, Croatia); Marin Vukovic (University of Zagreb Faculty of Electrical Engineering and Computing, Croatia)

Feedback Control of HVAC Systems Using Digital Twin Synchronization in Smart Campus Environments

Erilda Muka (Canadian Institute of Technology, Albania); Galia Marinova (Technical University of Sofia, Bulgaria & Technical University-Sofia, Bulgaria)

CONTEL/CEEPUS SESSION

Thursday, September 17, 16:30 - 18:00 (RUŽMARIN)

CONTEL/CEEPUS SESSION

Chairs: Galia Marinova (University of Sofia, Bulgaria), Martina Antonić (University of Zagreb, Croatia)

Holoscopy: A Modular Platform for Collaborative Endoscopic Streaming and Medical Education

Martina Antonic and Josip Lučić (University of Zagreb, Croatia); Željko Tadić (SMALT IT d.o.o, Croatia)

Capacity of a Duty-Cycled LoRaWAN Communication Window for Buffered Telemetry: An Antarctic Case Study

Nikolay Milovanov (New Bulgarian University, Bulgaria)

Explainability-Guided Feature Reduction for Lightweight Edge Occupancy Detection in Smart Spaces

Meriton Ibraimi (University of Tetovo, Macedonia, the former Yugoslav Republic of); Festim Halili and Merita Kasa Halili (State University of Tetovo, Macedonia, the former Yugoslav Republic of)

Digital Twin-Based Smart Port Optimization Using LSTM Forecasting

Manjola Zeneli (Academic & Assistant Lecturer, Albania); Galia Marinova (Technical University of Sofia, Bulgaria & Technical University-Sofia, Bulgaria)

A 3D Digital Twin Framework for Smart Microgrids: Template-Driven Scene Generation and Per-Mechanism Loss Projection

Elton Boshnjaku (Technical University of Sofia, Bulgaria); Galia Marinova (Technical University of Sofia, Bulgaria & Technical University-Sofia, Bulgaria)

Simulation-based Communication-Aware DRL for Smart Microgrids

Vassil Guliashki (Institute of Information and Communication Technologies - BAS, Bulgaria)

Unsupervised 1D CNN-Based False Data Injection Detection in Smart Microgrid Power Layer Monitoring

Behar Haxhismajli (Technical University of Sofia, Bulgaria); Galia Marinova (Technical University of Sofia, Bulgaria & Technical University-Sofia, Bulgaria)

CONTEL/COBCOM SESSION I

Friday, September 18, 16:30-18:00 (RUŽMARIN)

CONTEL/COBCOM SESSION I

Chairs: Erich Leitgeb, Daniel Kraus (University of Technology, Graz, Austria)

Influence of Climate change on wireless mmWave propagation

Tra My Tran and János Bitó (Budapest University of Technology and Economics, Hungary)

Symbol Detection Using Decoupled Filtering Based Estimation in MIMO OFDM Wireless Communication

Basabadatta Mohanty (IIIT Bhubaneswar, India); Harish Kumar Sahoo (Veer Surendra Sai University of Technology, India)

Range Enhancement of Backscatter Communication for Ambient IoT via LDPC Coding

Anas Elmesmari (Universität Kassel, Germany); Nour Mansour and Dirk Dahlhaus (University of Kassel, Germany)

Trusted and Dynamic Resource Sharing in 5G for Energy Efficient Multimedia Service Provision

Georgios Christos Tziavas and Dionysia Varvaigou (University of Patras, Greece); Sotirios Milionis and George T. Karetos (University of Thessaly, Greece); Konstantinos Lampropoulos, Charalampos Gkizas and Spyros Denazis (University of Patras, Greece)

Network Management Reliability Enabled by LLM: Analysis of Channel Capacity Case in the Presence of Beaulieu-Xie Fading

Dragana Krstic (University of Niš, Serbia); Suad Suljovic (MB University, Serbia); Nenad Petrovic (University of Nis, Serbia); Mariusz Glabowski (Poznan University of Technology, Poland)

CONTEL/COBCOM SESSION II

**Saturday, September 19, 10:30-12:00
(RUŽMARIN)**

SYM5/II: CONTEL/COBCOM SYMPOSIUM

*Chairs: Dragana Krstić (University of Niš, Serbia),
Gordan Ježić (University of Zagreb, Croatia)*

Human-Centered Exploration of Organizational Readiness for AI Adoption Before Deployment

Tihana Galinac Grbac, Sabina Lacmanović and Roberta Kontošić Pamić (Juraj Dobrila University of Pula, Croatia)

Quantum Explorer: An educational Toolkit for demonstrating Quantum Effects in Schools

Albert Huber (Technikum Wien, Austria); Andreas Drauschke (University of Applied Sciences Technikum Wien, Austria); Frank Reil (Joanneum Research Materials, Austria); Gabriel Anthony Giardina and Elias Eingang (UAS Technikum Vienna, Austria); Erich Leitgeb (Graz University of Technology, Austria); Dana Seyringer (Vorarlberg University of Applied Sciences (FHV), Austria)

160-Channel AWG Spectrometer for Miniaturized Raman-Based Milk Quality Monitoring

Dana Seyringer (Vorarlberg University of Applied Sciences (FHV), Austria); Matthias Domke (FHV - Vorarlberg University of Applied Sciences, Austria); Norbert Życzynski (Rzeszów University of Technology, Poland); Fadi Dohnal (FHV - Vorarlberg University of Applied Sciences, Austria); Erich Leitgeb (Graz University of Technology, Austria); Tadeusz Olejarsz (Rzeszów University of Technology, Poland)

Triple Integrator Based PID Controller Design

Mikulas Huba (Slovak University of Technology in Bratislava, Slovakia); Teofana Puleva (Technical University Sofia, Bulgaria); Alexandar Kamenov Ichtev (Technical University of Sofia, Bulgaria); Pavol Bistak (Slovak University of Technology in Bratislava, Slovakia)

From CAPEX to OPEX: A Metering-as-a-Service Model for LPWAN Smart Water Metering Deployments

Nikolay Milovanov (New Bulgarian University, Bulgaria)

Saturday, September 19, 10:30-12:00 (KAKTUS)

PAS1: POSTER / ABSTRACTS SESSION

Chair: Maja Škiljo (University of Split, Croatia)

A Regression-Based Framework for Separating Personal Uplink Exposure from Ambient Radiofrequency Fields: Combining Smartphone Telemetry with Body-Worn Exposimetry

Muzammal Amin (University of Turin, Italy); Chiara Pedrolì (Arpa Piemonte, Italy); Enrica Caputo (ARPA Piemonte, Italy); Anna Vignati (University of Turin, INFN (Torino), Italy)

PROFESSIONAL PROGRAM

Saturday, September 19, 10:30-12:00 (KAKTUS)

WICT: Workshop on Information and Communications Technologies

Chair: Maja Škiljo (University of Split, Croatia)

Network-Assisted Headway Selection and Software-Induced Capacity in Homogeneous ACC Vehicle Streams

Gianluca Mazzini (University of Ferrara, Italy)

From Control to Orchestration: Transformation of Data Governance in the AI Era

Snjezana Rosandic and Edita Škec (Ericsson Nikola Tesla, Croatia); Katarina Babić and Dinko Begusic (University of Split, Croatia)

Approximate integration defined in Java and Python

Mauro Pullin (University of Padova & Studio Ing. Mauro Pullin, Italy)

Didactic introduction to lambda-calculus

Mauro Pullin (University of Padova & Studio Ing. Mauro Pullin, Italy)

High-Precision Temperature Sensor Architecture for Human-Mimicking Phantoms

Stanisław Nowak, Grzegorz Cichocki, Paweł Żelazek, Wojciech Leszczyński, Krzysztof Cichoń and Cyryl Prentki (Poznan University of Technology, Poland)

Software Defined Radio for Attacks and Intrusion Detection in Wireless Networks

Nikola Danilović (Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, Croatia); Kresimir Grgic (Josip Juraj Strossmayer University of Osijek, Croatia)

Friday, September 18, 14:30 - 16:00 (KAKTUS)

W1: Workshop on Information Security and Intellectual Property (ISIP)

Chair: Marija Boban (University of Split, Croatia), Gordan Ježić (University of Zagreb, Croatia)

Maritime Cybersecurity in the Adriatic: An NIS2-Driven Resilience Framework

Marija Gombar (Hrvatska, Croatia & University North, Croatia); Marija Boban (University of Split Faculty of Law, Croatia); Tonči Prodan (University of Split, Croatia)

Shadow AI and Risky Disclosure of Business Information in the Workplace

Linda Martić Kuran (University of Applied Sciences Marko Marulić of Knin, Croatia); Vedran Uroš (University of Applied Sciences Marko Marulić of Knin, Croatia & University of Zagreb - FOI, Croatia); Damir Mihanović (University of Applied Sciences Marko Marulić of Knin, Croatia)

NFTs and Copyright Law

Marija Boban, and Krešimir Dadić (University of Split Faculty of Law, Croatia)

TUTORIALS

TUTORIAL T1

Thursday, September 17, 9:00 – 10:30 (AGAVA)

Dragan Poljak, and Mario Cvetković PhD

University of Split, FESB, Split, Croatia

Human Exposure to Electromagnetic Fields – Computational Models in Dosimetry

Summary: This Tutorial is based on the book, D. Poljak, M. Cvetkovic, Human Interaction with Electromagnetic Fields; Computational Models in Dosimetry, Elsevier 2019 and D. Poljak, A. Susnjara, "Deterministic and Stochastic Modeling in Computat. Electromagnetics," IEEE Press/Wiley, New Jersey, 2024 and on some recent journal/conference papers and recent presenters' activities in IEEE ICES SC6 Working Groups and IRPA NIR task group. Tutorial covers twofold aspects of human exposure to electromagnetic fields (EMF); the undesired exposure from artificial EMF sources and the biomedical applications of electromagnetic fields. Tutorial deals with some basic environmental aspects of electromagnetic fields, coupling mechanisms between human body and electromagnetic field, well-established biological effects of electromagnetic fields from static to high-frequency range, international safety guidelines related to limiting exposures to those fields, including relevant exposure limits, electromagnetic-thermal dosimetry models and the related analytical/numerical solution methods of governing equations. Finally, some recent findings arising from the activities carried out within the framework of IEEE ICES working groups, which Tutorial presenters participated (WG2, WG3, WG5 and WG7) and IRPA TG NIR will be reported.

First, theoretical/experimental methods of incident field dosimetry for the assessment of external fields due to low frequency (LF), intermediate frequency (IF) and high frequency (HF) sources are presented including a number of typical examples that cover exposures to power lines, transformer substations, PLC systems, RFID antennas, Wireless Power Transfer (WPT) systems and radio base stations pertaining to 2G/3G/4G and 5G mobile communication systems. Then, the tutorial presents in detail some efficient electromagnetic-thermal dosimetry methods for the assessment of human exposure to low frequency (LF), intermediate frequency (IF), high frequency (HF) and transient electromagnetic radiation featuring the use of integral/differential equation formulations and related numerical solution techniques (primarily based on the use of Boundary Element Method – BEM, Finite Element method – FEM hybrid BEM/FEM and Moment Method (MoM) approaches) for the evaluation of induced current densities, internal fields, specific absorption rate (SAR), incident power density (IPD), absorbed power density (APD), transmitted power density (TPD) and specific absorption (SA). Also, for HF exposures the related temperature elevation in tissues is of interest. In particular, for GHz frequency range, as far as 5G systems are of interest, a surface temperature increase on the air-body interface is analyzed. Illustrative computational examples pertain to typical realistic exposure scenarios, such as; pregnant woman/foetus exposed to low frequency (LF) fields, the human eye, the brain, the eye and the entire human head exposed to HF radiation. In particular, for exposure within GHz frequency range, several tissue models, from rather simple to more realistic, will be addressed. The obtained numerical results

for induced current densities, internal fields, SAR, IPD, APD TPD and SA are compared against exposure limits proposed by recently issued ICNIRP 2020 (International Commission on Non Ionizing Radiation Protection). This is followed by various examples of biomedical applications of electromagnetic fields, including the transcranial magnetic stimulation (TMS), transcranial electrical stimulation (TES), but also some electrotherapy and magnetotherapy techniques. Also, some illustrative computational examples pertaining to thermal modeling of certain ophthalmological procedures will be given.

In the last part of the Tutorial the stochastic modeling of electromagnetic fields is addressed. This part of the Tutorial is mostly based on the book: D. Poljak, A. Susnjara, "Deterministic and Stochastic Modeling in Computat. Electromagnetics," IEEE Press/Wiley, New Jersey, 2024. Note that the input parameters of models used in bioelectromagnetics suffer from uncertainties in input data set. The values of body tissue parameters such as permittivity and the electrical conductivity vary significantly, depending not only on the age and gender, but also between healthy and ill individuals. Moreover, they are obtained under different measurements on ex vivo animal and human tissues, and exhibit relatively appreciable variations from their average values. When used in computational models, these average values sometimes may result in a rough approximation of realistic scenarios. The models used in bioelectromagnetics are computationally rather demanding as they represent rather complex physical phenomena. Consequently, uncertainty quantification (UQ) based on traditional Monte Carlo method appears to be computationally rather expensive. Therefore, alternative methods such as generalized polynomial chaos and stochastic collocation have become of interest to many researchers in this research area. In this tutorial, a primer on the application of stochastic collocation (SC) and several illustrative examples are given. Finally, a sensitivity analysis (SA) techniques on the impact of individual input parameters will be presented.



Dragan Poljak received his PhD in el. Eng. in 1996 from the Univ. of Split, Croatia. He is the Full Prof. at Dept. of Electron. and Computing, Univ. of Split. His research interests include computational electromagnetics (electromagnetic compatibility, bioelectromagnetics, ground penetrating radar and plasma physics). To date Prof. Poljak has published more than 160 journ. and 250 conf. papers, and authored some books, e.g. two by Wiley, New Jersey and one by Elsevier, St Louis. He is a Senior member of IEEE, a member of Editorial Board of Eng. Anal. with Boundary Elements, Math. Problems in Eng. And IET Sci. Measur. & Techn. He was awarded by several prizes for his research achievements, such as National Prize for Science (2004), Croatian sect. of IEEE annual Award (2016), Technical Achievement Award of the IEEE EMC Society (2019), George Green Medal from University of Mississippi (2021), IEEE Standards Associations – Certificate of Appreciation, 2022 and National Prize for Science (2023). From May 2013 to June 2021 Prof. Poljak was a member of the board of the Croatian Science Foundation. He was involved in ITER physics EUROfusion collaboration and he is currently involved in IFMIF-DONES EUROfusion collaboration and in Croatian center for excellence in research for tech. sciences. He is active in few Working Groups of IEEE/Internat. Committee on Electromagnetic Safety (ICES) Tech. Comm. 95 SC6 EMF Dosimetry Modeling, (co-chair of WG2 and WG7) and Task Group of Nonionizing Radiation of International Radiation Protection Association (IRPA).



Mario Cvetković received his B.S. degree from the University of Split, Split, Croatia, in 2005, the M.Phil. degree from Wessex Institute of Technology, University of Wales, Cardiff, U.K., in 2009, and the Ph.D. degree from the University of Split in 2013. He is currently Chair for Fundamentals in electrical engineering and an Associate Professor with the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB), University of Split, Croatia. To date, he has co-authored more than 100 papers published in international journals and conference proceedings and several book chapters. In 2019 he coauthored a book entitled "Human Interaction with Electromagnetic Fields – Computational Models in Dosimetry" published by Elsevier. His research interests include numerical modeling with finite elements and method of moments, computational bioelectromagnetics, and heat transfer related phenomena. He held a series of tutorials and seminars related to

advanced topics in bioelectromagnetics and various aspects of interaction of humans with electromagnetic fields at: Technical University of Ilmenau, Germany (2010), Malardalen University, Vasteras, Sweden (2014, 2018), Nagoya Institute of Technology, Nagoya, Japan (2017, 2023), University of Maribor, Slovenia (2018, 2019), Hohai University Nanjing, China (2025), several SpliTech conferences (2016, 2017, 2018, 2019, 2020, 2023, 2024, 2025), and SoftCOM conferences (2019, 2021, 2022). He is a Member of the International Committee on Electromagnetic Safety (ICES) Technical Committee 95 and its Subcommittee 6 EMF Dosimetry Modeling where he also served as a Working Group 2 secretary from 2017-2019. He was the recipient of the Best Student Paper Award, awarded at the 16th Edition of the International Conference SoftCOM 2008.

TUTORIAL T2

Thursday, September 17, 14:30 – 16:00 (AGAVA)

Marta Cavagnaro, PhD

Sapienza University of Rome, Rome, Italy

Klementina Vidjak, PhD

University of Split, FESB, Split, Croatia

From Tissue Dielectric Properties to Smart Microwave Ablation Applicators: Principles, Methods, and Challenges

Summary: Microwave thermal ablation (MTA) is a therapeutic technique used for the in-situ destruction of malignant tissue. This tutorial first introduces the MTA technique and then briefly discusses current state-of-the-art technologies used for treatment guidance, monitoring, and post-procedure outcome assessment, highlighting the open challenges related to real-time feedback and reliable ablation-zone control. The second part of the tutorial focuses on the main principles and mechanisms that underly the MTA technique. Dielectric properties are discussed first, since they determine the “reaction” of the tissues to the applied electromagnetic field. The behaviour of dielectric properties with the frequency, their changes during MTA heating and the methods used for their measurement are described. Particular emphasis is placed on the open-ended coaxial probe technique, one of the most widely used methods for dielectric characterization at microwave frequencies. The role of dielectric properties in applicator design, numerical modelling, treatment planning, and ablation-zone prediction is discussed, together with the practical limitations of conventional dielectric measurement approaches. Based on these considerations, the tutorial identifies a key technological gap in current MTA systems: while microwave applicators are primarily designed for energy delivery, they typically provide limited direct information about the evolving tissue state during treatment. Finally, the tutorial presents an emerging solution based on using the MTA applicator itself as a sensing device for in-situ dielectric spectroscopy, including results from ongoing research within the presenters' research group. This approach has the potential to support real-time monitoring, ablation-zone estimation, and the development of smarter, feedback-controlled microwave ablation systems.



Marta Cavagnaro (M'00, SM'22) received the *cum laude* Electronic Engineering degree (1993) and the Ph.D. degree (1997) in Electronic Engineering from Sapienza University of Rome, Rome, Italy. She is Associate Professor at the Department of Information Engineering, Electronics and Telecommunications of the same university. Her research interests are related to dosimetric aspects of the interaction between electromagnetic fields and biological systems, as medical applications, measurements of dielectric properties of tissues, and environmental impact of mobile communication systems. She is Associate Editor of the *Bioelectromagnetics* journal (Wiley), *Sensors* (MDPI), and serves as anonymous reviewer for several scientific journals. She is a member of the Thermal Medicine Standard Committee of ASME (The American Society of Mechanical Engineers), and a member of the Italian CEI TC106 devoted to standardization issues related to human exposure to electromagnetic fields. She participated in several EU

funded COST action related to medical applications of electromagnetic fields (EMFMED, MiMed, MyWAVE). She is vice Chair of the Technical Community on Therapeutic & Diagnostic Systems and Technologies (TC-TDST) of IEEE EMBS. She is author or co-author of more than 200 scientific papers.



Klementina Vidjak received the *summa cum laude* Master's degree in Electronics and Computer Engineering in 2020 from the University of Split, Croatia, and the Ph.D. degree in Information and Communication Technologies from Sapienza University of Rome, Rome, Italy, in 2024, *cum laude*. She is currently a postdoctoral researcher at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture — FESB, University of Split. Her research interests are related to applied electromagnetics, biomedical applications of electromagnetic fields, dielectric characterization of biological tissues, electromagnetic dosimetry, and microwave-based therapeutic and diagnostic technologies. She serves as an anonymous reviewer for several scientific journals and is an IEEE member.

BUSINESS FORUM

Friday, September 18, 09:00-10:30 (AGAVA)

2nd Workshop on Computer Vision and Artificial Intelligence in Fruit Cultivation

ORGANIZING COMMITTEE

- Prof Vladan Papić, University of Split, FESB, Croatia, vpapic@fesb.hr
- Prof Vassilis Kaburlasos, International Hellenic University (IHU), Greece , vgkabs@ihu.gr
- Prof Frane Strikić, University of Split, University Department of Marine Studies, Croatia, frane.strikić@unist.hr

Timetable:

- Introduction (15 min)
- „Fruit Yield estimation using computer vision“ dr.sc. Stanko Kružić (20 min)
- „Multispectral analysis of olive fruits - overview“ Ana Šarić Gudelj (20 min)
- Current status and future research (15 min)
- Discussion (20 min)

Workshop supported by the Croatian Science Foundation under the project number HRZZ IP-2024-05-6393.



Workshop is linked with project HRZZ IP-2024-05-6393 (COVIO) - Computer Vision in Olive Fruit Detection and Yield Estimation

Expected number of attendants: 10

Saturday, September 19, 08:30-10:00 (AGAVA)

ROUNDTABLE: Towards a Shared Excellence Hub Building the EXCEED Digital Health Research Hub

The EXCEED project invites you to a roundtable at SoftCOM on building a shared excellence hub for digital health research. Bringing FESB's engineering expertise together with MEFST's clinical and biomedical knowledge, the session opens a conversation on what it takes to turn two research communities into one lasting hub for collaboration. We will discuss anchoring the hub around existing infrastructure — from FESB's research laboratory to MEFST's clinical facilities — and practical ways to share expertise, from joint seminars and staff exchanges to a shared directory of competencies and equipment. We will also explore how to engage industry, SMEs, and public health stakeholders, and position the hub as a springboard for competitive Horizon Europe consortia. Come share your perspective and help shape the next steps, from governance to a roadmap for sustaining this collaboration well beyond EXCEED. All researchers, clinicians, and industry representatives working in digital health are welcome to join.

Organised by

FESB & MEFST



EXCEED project - Building Capacities for Excellence in Digital Health Research

Project leader at the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB) is prof. dr. sc. Mladen Russo. Project is implemented from 15th January 2026 to 14th January 2027. Total project budget is 99,875.52 EUR.

For more information about the project, please visit the following link:

<https://exceed.fesb.unist.hr/>

The project is financed under the Synergies Program (Call - Route to Synergies - DIGIT.2.2.02.) within the Digital, Innovation and Green Technology (DIGIT) Project, funded by the World Bank through the Loan Agreement (Loan No. 9558-HR) and implemented by the Ministry of Science, Education and Youth of the Republic of Croatia.



GENERAL CONFERENCE INFORMATION AND HOTEL FLOORPLAN

ABOUT

The 34th International Conference on Software, Telecommunications and Computer Networks (SoftCOM 2026) will be held on September 17-19 in Split, Croatia.

ELECTRONIC PROCEEDINGS

Electronic Proceedings and Final Program will be available at the conference website. Participation letters will be issued on request.

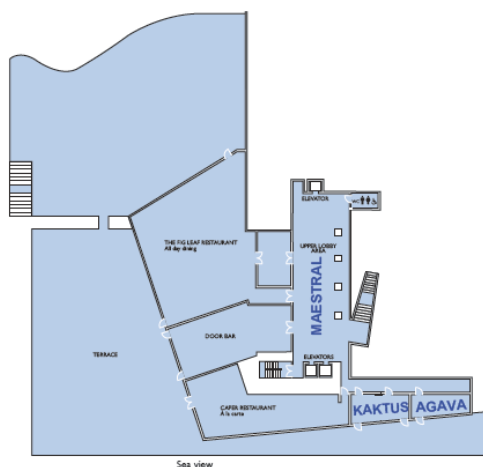
LANGUAGE

The Conference language is English.

SECRETARY

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FIRST FLOOR



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