

Name of the in-person session	Date	Time	Room	Session Chair	Num Paper	Title of paper	1st author name
Aerial Communications 1	08/12/2021	1:00-12:30 CE	N108	Omid Esrafilian	1570718352	Model-aided Deep Reinforcement Learning for Sample-efficient UAV Trajectory Design in IoT Networks	Omid Esrafilian
					1570723042	Fairness-Aware Closed-Form UL-DL Power Allocation for NOMA in UL Heavy UAV Systems	Chen Wang
					1570729033	Dynamic Active-Passive Beamforming for Intelligent Reflecting Surface Aided UAV Communications	Qiaonan Zhu
					1570730434	Federated Learning for UAV Swarms Under Class Imbalance and Power Consumption Constraints	Ilyes Mrad
Aerial Communications 2	09/12/2021	1:00-12:30 CE	N110	Maudoux Christophe	1570723580	On the Deployment Problem in Cell-Free UAV Networks	Carles Diaz-Vilor
					1570717938	Adaptive Edge Caching in UAV-assisted 5G Network	Gaoxiang Wu
					1570730663	Blockchain-Secured Data Collection for UAV-Assisted IoT: A DDPG Approach	Xunqiang Lan
					1570717250	Optimizing Federated Edge Learning on Non-IID Data via Neural Architecture Search	Feifei Zhang
					1570717170	Federated Learning for Air Quality Index Prediction Using UAV Swarm Networks	Prateek Chhikara
AI-based estimation	10/12/2021	1:00-12:30 CE	N108	-	1570717723	LTE Device Identification Based on RF Fingerprint with Multi-Channel Convolutional Neural Network	Pengcheng Yin
					1570718566	Learning-aided joint time-frequency channel estimation for 5G new radio	Nitin Jonathan Myers
					1570721860	Dual-Net for Joint Channel Estimation and Data Recovery in Grant-free Massive Access	Yanna Bai
					1570723468	Neural Augmentation of Kalman Filter with Hypernetwork for Channel Tracking	Pratik Kumar
					1570730031	Temporal Averaging LSTM-based Channel Estimation Scheme for IEEE 802.11p Standard	Abdul karim Gizzini
Big Data and Multimedia	09/12/2021	4:00-15:30 CE	N109	-	1570718546	Caching Heterogeneous Size Content in Small Cell Networks with CoMP Joint Transmissions	Guilherme Iecker Ricardo
					1570723534	Multi-dimensional indexes for point and range queries on outsourced encrypted data	Sabrina De Capitani di Vimercati
					1570720958	Maximizing Producer-Driven Cache Valuation in Information-Centric Networks	Faria Khandaker
					1570729060	Semantic Communications for Speech Recognition	Zhenzi Weng
Cloud and Edge Computing	10/12/2021	9:00-10:30 CE	N109	Yuval Ben-Hur	1570729876	Context-Aware Augmented Reality with 5G Edge	Jacky Cao
					1570730542	Throughput Maximization of Virtual Machine Communications in Bandwidth-Constrained Data Centers	Jeff Lutz
					1570723093	Coding on Dual-Parameter Barrier Channels beyond Worst-Case Correction	Yuval Ben-Hur
					1570729960	Fault-Tolerant Computation Meets Network Coding: Optimal Scheduling in Parallel Computing	Congduan Li
					1570730046	Variable Coded Batch Matrix Multiplication	Lev Tautou
Communication Theory	08/12/2021	9:00-10:30 CE	N109	Vincent Chan	1570716265	Individual Correlation Properties and Structural Features of Periodic Complementary Sequences	Igor Gepko
					1570717729	FPGA Implementations of Layered MinSum LDPC Decoders Using RCQ Message Passing	Caleb Terrill
					1570716726	Algebraic Design of a Class of Rate 1/3 Quasi-Cyclic LDPC Codes	Michael Tanner
					1570730526	Nonlinear Distortion in Distributed Massive MIMO Systems: A Indoor Channel Measurement Analysis	Bin Liu
					1570716592	IGRAND: decode any product code	Kevin Galligan
Communications Security	09/12/2021	1:00-12:30 CE	N109	-	1570717308	Privacy-preserving D2D Cooperative Location Verification	Shushu Liu
					1570718296	Experimental Evaluation of a Modular Coding Scheme for Physical Layer Security	Luis Torres-Figueroa
					1570723124	Joint Transmit Precoding and Reflect Beamforming for IRS-Assisted MIMO-OFDM Secure Communications	Weiheng Jiang
					1570730275	On the Secrecy Rate under Statistical QoS Provisioning for RIS-assisted MISO Wiretap Channel	Vaibhav Kumar
					1570723572	Two-Hop Network with Multiple Decision Centers under Expected-Rate Constraints	Mustapha Hamad
Computing Security	10/12/2021	9:00-10:30 CE	N110	-	1570711709	MIRAI Botnet Attack Detection with Auto-Associative Dense Random Neural Network	Mert Nakip
					1570717946	Blockchain-based system for e-voting using Blind Signature protocol	Perez Garcia Julio Cesar
					1570721692	Friend or Foe: Discerning Benign vs Malicious Software and Malware Family	Aaron Walker
					1570730339	NGS: Mitigating DDoS Attacks using SDN-based Network Gate Shield	Mohamad Suhel Dalati
					1570730499	Trust-based gateway selection in a multi-tiers blockchain architecture	Yasmine Bachi
CRAEN	09/12/2021	9:00-10:30 CE	N109	Praneeth Susarla	1570718161	DQN-based Beamforming for Uplink mmWave Cellular-Connected UAVs	Praneeth Susarla
					1570718582	A Deep Learning Framework for Distributed Channel Selection in a Congested Uncooperative Spectrum	Stephan Frisbie
					1570720374	Short-Packet Communications in Multi-Hop WPINs: Performance Analysis and Deep Learning Design	Toan-Van Nguyen
					1570720612	Learning-based Strategy for RIS-Assisted Terahertz Virtual Reality Networks	Xiaonan Liu
					1570714508	Activity Detection using 2D LIDAR for Healthcare and Monitoring	Mondher Bouazizi
					1570717272	Patient-Driven Network Selection in multi-RAT Health Systems Using Deep Reinforcement Learning	Heba Dawoud

E-Health	10/12/2021	9:00-10:30 CE	N111	Virginia Pilloni	1570723332	BePOCH: Improving Federated Learning Performance in Resource-Constrained Computing Devices	Lenart Ibraimi
					1570730230	Daily Activities Monitoring of Users for Well-Being and Stress Correlation Using Wearable Devices	Francesca Marcello
					1570719581	Enhancement of COVID-19 Detection by Unravelling its Structure and Selecting the Optimal Attributes	Andreas Andreou
					1570730450	A Wearable Wireless Monitoring System for the Detection of Pulmonary Edema	Katjana Krhac
Federated learning	08/12/2021	9:00-10:30 CE	N108	Stefania Bartoletti	1570722370	Convergence analysis and Design principle for Federated learning in Wireless network	Shuo Wan
					1570729727	Entropy-Driven Stochastic Policy for Fast Federated Learning in Beyond 5G Edge-RAN	Brahim Aamer
					1570730178	Bayesian AirComp with Sign-Alignment Precoding for Wireless Federated Learning	Chanho Park
					1570723334	Concept Drift Detection in Federated Networked Systems	Dimitrios Manias
					1570729977	Machine Learning Driven Model for Software Management of Photonics Switching Systems	Ihtesham Khan
Full-Duplex Communications	09/12/2021	4:00-15:30 CE	N110	Dirk Slock	1570723205	Non-Coherent Fast-Forward Relays for Full-Duplex Jamming Attack	Vivek Chaudhary
					1570723483	Hybrid Beamforming and Combining for Millimeter Wave Full Duplex Massive MIMO Interference Channel	Chandan Sheemar
					1570723682	Direction-Assisted Beam Management in Full Duplex Millimeter Wave Massive MIMO Systems	Md Atiql Islam
Green Communication Networks	08/12/2021	1:00-12:30 CE	N109	Han Hu	1570717025	MEC and Blockchain-Enabled Energy-Efficient Internet of Vehicles with A3C Approach	Xinyu Ye
					1570718083	Energy Sharing based Cooperative Dual-powered Green Cellular Networks	Ashutosh Balakrishnan
					1570721826	Dynamic Task Offloading in MEC-Enabled IoT Networks: A Hybrid DDPG-D3QN Approach	Han Hu
					1570723153	Mobile Traffic Forecasting for Green 5G Networks	Nicola Piovesan
Green Communication Systems	10/12/2021	1:00-12:30 CE	N109	Xianfu Chen	1570730421	Dynamic Ensemble Inference at the Edge	Mattia Merluzzi
					1570718200	Secure Performance Analysis of RIS-aided Wireless Communication Systems	Dinh-Thuan Do
					1570721916	Performance Optimization in Heterogeneous WiFi and Cellular Mobile Edge Computing Systems	Liwen Niu
					1570730537	A Distributed Approach to Energy Efficiency in Seamless IoT Communications	Venkataramani Kumar
Intelligent Reflecting Surfaces	09/12/2021	9:00-10:30 CE	N108	Tirkkonen Olav	1570717467	Real-Time Beam steering in mmWave with Reconfigurable Intelligent Meta-surfaces	Carola Rizza
					1570719921	Placement Optimization and Power Control in Intelligent Reflecting Surface Aided Multiuser System	Bifeng Ling
					1570730200	Static Reflecting Surface Based on Population-level Optimization	Hanan Al-Tous
					1570716741	RIS and Cell-Free Massive MIMO: A Marriage For Harsh Propagation Environments	Trinh Chien
IoT Security	08/12/2021	1:00-12:30 CE	N110	Domenico Scotece	1570718651	Physical Layer Security for V2I Communications: Reflecting Surfaces Vs. Relaying	Neji Mensi
					1570722404	AirMixML: Over-the-Air Data Mixup for Inherently Privacy-Preserving Edge Machine Learning	Yusuke Koda
					1570722275	Hijacking Downlink Path Selection in LoRaWAN	Pierluigi Locatelli
					1570723023	Secrecy Rate Maximization with Gridded UAV Swarm Jamming for passive Eavesdropping	Christantus Nnamani
IoT SN1	08/12/2021	9:00-10:30 CE	N111	Alessio Mora	1570723648	Deep Learning for Hardware-Impaired Wireless Secret Key Generation with Man-in-the-Middle Attacks	Mehdi Letafati
					1570730688	FedEqual: Defending Model Poisoning Attacks in Heterogeneous Federated Learning	Ling-Yuan Chen
					1570717749	Receiving Colliding LoRa Packets with Hard Information Iterative Decoding	Raejoon Jung
					1570722905	Optimal Deployment of Fog Nodes, Microservices and SDN Controllers in Time-Strict IoT Scenarios	Juan Luis Herrera
IoT SN2	10/12/2021	9:00-10:30 CE	N112	Mi Chen	1570723815	An Analysis of Amazon Echo's Network Behavior	Jan Janak
					1570729416	Exploring Tradeoffs between Energy Consumption and Network Performance in Cellular-IoT: a Survey	Nicholas Accurso
					1570730242	Communication-Efficient Heterogeneous Federated Dropout in Cross-device Settings	Paolo Bellavista
					1570717158	Semi-Supervised Learning for Channel Charting-Aided IoT Localization in Millimeter Wave Networks	Qianqian Zhang
Machine Learning and Emerging Network Technologies	08/12/2021	4:00-15:30 CE	N108	Israel Leyva Mayorga	1570717389	STEPS - Score Table based Evaluation and Parameters Surfing approach of LoRaWAN	Mi Chen
					1570721501	Congestion-Aware Routing in Dynamic IoT Networks: A Reinforcement Learning Approach	Hossam Farag
					1570718631	Dynamic Router's Buffer Sizing using Passive Measurements and P4 Programmable Switches	Elie F Kfoury
					1570718070	Indoor monitoring system based on ARQ signaling generated by a Visible Light Communication link	Joan Bas
Machine Learning and Emerging Network Technologies	08/12/2021	4:00-15:30 CE	N108	Israel Leyva Mayorga	1570718157	Transmission policy design for critical services subject to reliability versus age minimization	Ayat Zaki-Hindi
					1570722772	ECHO: Enhanced Conditional Handover boosted by Trajectory Prediction	Anna Prado
					1570718210	Direct Analytics of Generalized Deduplication Compressed IoT Data	Aaron Hurst
					1570729971	On Velocity-based Association Policies for Multi-tier 5G Wireless Networks	Pierre Popineau
Machine Learning and Emerging Network Technologies					1570730510	On the Performance of Blockchain-enabled RAN-as-a-service in Beyond 5G Networks	Francesc Wilhelmi
					1570715729	Taking two Birds with one k-NN Cache	Damiano Carra
					1570717129	Fronthaul-Aware Scheduling Strategies for Next Generation RANs	Sandra Lagen

Machine Learning and Network Performance	09/12/2021	4:00-15:30 CE	N111	Mi Chen	1570721213	Self-optimized network: When Machine Learning Meets Optimization	Abdelhakim Nacef
					1570722918	On the Efficiency of Service and Data Handoff Protocols in Edge Computing Systems	Domenico Scotece
					1570723526	Split the cash from cache-friendly recommendations	Dimitra Tsigkari
MIMO	08/12/2021	4:00-15:30 CE	N109	Adrian Agustin	1570713744	Rotatable URAs for Line-of-Sight MIMO Transmission	Heedong Do
					1570723535	Machine Learning Assisted Phase-less Millimeter-Wave Beam Alignment in Multipath Channels	Benjamin Domae
						DeepIC: coding for interference channels via Deep Learning	
					1570730489	Analog Eigen-Beamforming for mmWave Systems: Performance under practical constraints	Corentin Fonteneau
				1570722013	Low-complexity Multicast Beamforming for Multi-stream Multi-group Communications	Hamidreza Mahmoodi	
Network Performance Evaluation	08/12/2021	4:00-15:30 CE	N111	Narcis	1570718270	On the Challenges and Performance of Cooperative Communication in 5G and B5G Systems	Christopher Lehmann
					1570718306	Incentivizing Mobile Edge Caching and Sharing: An Evolutionary Game Approach	Mingyu Li
					1570715264	Investigation of Beamforming-NOMA in mmWave Mobile Communication Networks with Spectrum Sharing	Constantinos Vrontos
					1570722177	Comparison of performance- and cost-optimal functional splits in 5G and beyond	Alberto Martínez Alba
					1570723187	Radio Link Failure Prediction in 5G Networks	Karim Boutiba
Network Virtualization	10/12/2021	1:00-12:30 CE	N110	Sami Souihi	1570721997	Placement, Routing and Scheduling Optimizations in Cloud-RAN	Hatem Ibn-khedher
					1570722176	Machine Learning based Root Cause Analysis for SDN Network	Van Tong
					1570722225	Evaluating Softwarization Gains in Drone Networks	Mohannad Alharthi
					1570722260	ML-driven scaling of 5G Cloud-Native RANs	Akrit Mudvari
				1570723548	Towards SDN-based Deterministic Networking: Deterministic E2E Delay Case	Aiman Nait abbou	
NOMA	09/12/2021	9:00-10:30 CE	N110	Angel Lozano	1570717140	Energy-Efficient Cooperative Backscattering Closed-Form Solution for NOMA	Hajar El Hassani
					1570723388	Minimizing AoI in Resource-Constrained Multi-Source Relaying Systems with Stochastic Arrivals	Abolfazl Zakeri
					1570729059	Compressed Sensing Channel Estimation for OTFS Modulation in Non-Integer Delay-Doppler Domain	Felipe Gómez-Cuba
Optical Communications	09/12/2021	4:00-15:30 CE	N108	-	1570716583	Modelling of Multi-Tier Handover in LiFi Networks	Ahmet Burak Ozyurt
					1570721295	Strategies for Dedicated Path Protection in Filterless Optical Networks	Memedhe Ibrahim
					1570722309	Reliable Optical Receiver for Highly Dynamic Wireless Channels: An Experimental Demonstration	Shenjie Huang
					1570729944	Quad-LED OTFS Modulation in Indoor Visible Light Communication Systems	Sujata Sinha
					1570729958	Single LED Gbps Visible Light Communication with Probabilistic Shaping	Tilahun Gutema
Quantum, Molecular, Biological, and Multi-scale Communications	10/12/2021	4:00-15:30 CE	N109	Max Schäfer	1570716549	Channel Modeling for Drug Carrier Matrices	Maximilian Schäfer
					1570730395	Spatiotemporal Control of Genetic Circuit with Pulse Generation for Molecular Communication	Dadi Bi
					1570729595	Private Set Intersection with Delegated Blind Quantum Computing	Michele Amoretti
					1570730216	Leader-Follower Dynamics for Diffusion-based Molecular Communication	Jorge Torres Gomez
Resource allocation I	08/12/2021	9:00-10:30 CE	N110	-	1570722280	Learning Probing Beams for Fast mmWave Beam Alignment	Yuqiang Heng
					1570727638	Learning-Based Multiplexing of Grant-Based and Grant-Free Heterogeneous Services with Short Packets	Duc Dung Tran
					1570728327	Improving the Communication and Computation Efficiency of Split Learning for IoT Applications	Ahmad Ayad
					1570729863	Fundamental limits of over-the-air optimization: Are analog schemes optimal?	Shubham Jha
					1570730236	Hierarchical Beamforming in Random Access Channels	Adrian Agustin
Resource allocation II	10/12/2021	4:00-15:30 CE	N110	Hui Wang	1570730330	Decentralized Cooperative Resource Allocation with Reliability at Four Nines	Carlos Santiago Morejón G
					1570717897	Data-driven Network Orchestrator for 5G Satellite-Terrestrial Integrated Network: The ANCHOR Project	Fabio Patrone
					1570718522	Resource Allocation for Public Safety Users in the 5G Cellular Network	Sarkis Moussa
					1570718707	Optimal Cost Network Design for Bounded Delay Data Transfer from PMU to Control Center	Arunabha Sen
				1570730341	Multi-objective Mobile Charging Scheduling on the Internet of Electric Vehicles: a DRL Approach	Hui Wang	
Satellite and Space Communications	09/12/2021	4:00-15:30 CE	N112	Beatriz Soret	1570723652	Adaptive Access Mode Selection in Space-Ground Integrated Vehicular Networks	Conghao Zhou
					1570730398	Uplink Transmission Probability Functions for LoRa-Based Direct-to-Satellite IoT: A Case Study	Kai Vogelgesang
					1570730549	Inter-Plane Inter-Satellite Connectivity in LEO Constellations: Beam Switching vs. Beam Steering	Israel Leyva-Mayorga
					1570722858	An Optimal Scheme to Recharge Communication Drones	Edgar Arribas
Service and Mobility				Farid Nait	1570718515	Node Localization in WSN and IoT Using Harris Hawks Optimization Algorithm	Miloud Mihoubi
					1570723339	IoTRoam - Design and implementation of an open LoRaWAN roaming architecture	Sandoche Balakrichenan

Service and Mobility Management	10/12/2021	4:00-15:30 CE	N111	Farid Hach Abdesselam	1570730512	A Genetic Algorithm for the Placement of Latency-Sensitive Multiplayer Game Servers in the Fog	Benamer Rayane
					1570716708	Blind Symbol Timing and Carrier Phase Estimation for PCMA Satellite Signals via Cyclic Statistics	Andreas Feder
					1570720296	Complex Network Analysis for Ultra-Large-Scale MEC Small-Cell Based Peer-Offloading	Hao Ran Chi
Services and Applications	09/12/2021	9:00-10:30 CE	N111	Stefano Giordano	1570717594	Combined Forest: a New Supervised Approach for a Machine-Learning-based Botnets Detection	Christophe Maudoux
					1570717949	Federated Learning for Energy-Efficient Thermal Comfort Control Service in Smart Buildings	Maysaa Khalil
					1570720905	Semi-Deterministic Deployment based Area Coverage Optimization in Mobile WSN	Boualem Adda
					1570718415	Towards Scalable and Expressive Stream Packet Processing	Alessandra Fais
					1570723552	Quality Optimization of Live Streaming Services over HTTP with Reinforcement Learning	Farzad Tashtarian
Signal Processing for Communications	10/12/2021	9:00-10:30 CE	N108	Kun Chen Hu	1570730316	Maximum Receiver Harvesting Area of Backscatter Signals from Ambient Low-Frequency Mobile Networks	Ritayan Biswas
					1570711703	Effect of Spatial Correlation on the Performance of Non-coherent Massive MIMO based on DMPSK	Manuel José López-Morale
					1570717048	A Simplified Multi-Antenna Receiver for General Binary-Modulated Ambient Backscatter Signal	Xiyu Wang
					1570723605	Wideband Millimeter-Wave Massive MIMO Channel Training via Compressed Sensing	Tzu-Hsuan Chou
					1570729896	Optimal, Low-Complexity Beamforming for Discrete Phase Reconfigurable Intelligent Surfaces	Juan Sanchez
Software Defined Networking	10/12/2021	4:00-15:30 CE	N112	Ali El Amine	1570730570	Analysis and Compensation of Spatial Correlation in Data Transmission Using RIS	Xiao Chen
					1570717418	QCell: Self-optimization of Softwarized 5G Networks through Deep Q-learning	Bernardo Casasole
					1570723226	Shortening the Deployment Time of SFC by Adaptively Querying Resource Providers	Ali El Amine
					1570723797	A multidimensional coloured packing approach for Network Slicing with dedicated protection	Hicham Lesfari
Traffic management	08/12/2021	4:00-15:30 CE	N110	-	1570717895	Deep Learning-based QoS Prediction with Innate Knowledge of the Radio Access Network	Jose Perdomo
					1570717959	Deep Reinforcement Learning for Scheduling Uplink IoT Traffic with Strict Deadlines	Benoît-Marie Robaglia
					1570718378	Deep Reinforcement Learning for Wireless Resource Allocation Using Buffer State Information	Eike Manuel Bansbach
					1570718488	Deep Reinforcement Learning for URLLC data management on top of scheduled eMBB traffic	Fabio Saggese
					1570729721	SPPNet: An Approach For Real-Time Encrypted Traffic Classification Using Deep Learning	Fabien Meslet-Millet
V2X, UAVs and QoS	10/12/2021	4:00-15:30 CE	N108	Augusto Casaca	1570717514	Autonomous Network Traffic Classifier Agent for Autonomic Network Management System	Claire Naiga-Serugunda
					1570720894	Transfer Time Calculation in FANET and WSN Networks in Crisis Scenario	Grace Khayat
					1570723562	Autonomous UAV Aided Vehicular Edge Computing for Service Offering	Mohammed Laroui
					1570729904	On Heterogeneous Transfer Learning for Improved Network Service Performance Prediction	Fernando Garcia Sanz
					1570723415	MIINT: Middleware for IIoT Platforms Integration	Riccardo Venanzi