2024
11th International Symposium on Telecommunication

ICT Research Institute ITRC
IEEE
IEEE IRAN SECTION
ISC MINISTRY OF ICT

Communication in the Age of Artificial Intelligence
October 9-10, 2024

Thursday	Hall: Main hall	Date: 10 Oct
CT3		Time: 8:45- 10:15
Wireless Communications and Mobile Networks		
Session chairs: Kamal Mohamedpour, Babak Seyfe, Nasser Yazdani		

Paper id	Title of paper	Authors
1053	Interference Precancellation in Multiuser Vector Broadcast Channels Using PSK Modulation	Amir R. Forouzan Ramin Salimijazi
1117	Adaptive Edge Caching in mmWave Integrated Access and Backhaul Networks	Zahra Rashidi Fatemeh Sadat Hashemi Nazarifard Vesal Hakami
1122	Automatic Modulation Detection in Non-orthogonal Multiple Access Systems	Fatemeh Shabanali Mehrdad Ardebilipour
1169	A Traffic Control Approach to Minimize Congestion in O-RAN Architecture	Ali Atashbar Hamed Alizadeh Ghazijahani Mahmoud Atashbar
1152	Hybrid Precoding Design based on Alternating Optimization in mmWave MIMO Systems	Mehrdad Momen-Tayefeh Ali Olfat Mojtaba Amiri
1141	End-to-end Performance for User-centric Cell-free mMIMO Networks with Multiple CPUs	Sara Razavi Mohammad Hadi Mohammad Reza Pakravan

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Thursday	Hall: H1	Date: 10 Oct
ST2		Time: 8:45- 10:15
Legal, Ethical and Regulatory – Innovation – Strategy		
Session chairs: Amir Hossein Mozayani, Mohammad Kazem Sayadi, Hadi Shahriar Shahhosseini		

Paper id	Title of paper	Authors
1138	Analyzing the Challenges of Applying Artificial Intelligence in the Field of Employment and Offering Solutions to Improve Skills and Workforce Training	Azam sadat Mortazavi Kahangi Hassan Yeganeh Anita Hadizadeh
1085	Examining the legal challenges and loopholes of artificial intelligence by considering the upstream documents of the country	Mohammad Hadi Bokaei Elham Rafati Davood Heidari Kani Farbod Rabizadeh Fard Ali Derakhshani Iman Derakhshani
1021	Performance Comparison of Internet Domain Ranking Techniques	Davood Maleki Pejman Goudarzi Alireza Mansouri
1137	From Policy to Innovation: A Comparative Analysis of Digital Economy Strategies in Selected Countries	Hassan Yeganeh Fatemeh Kassaie Najafi Afsaneh Vahedian

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Thursday	Hall: H2	Date: 10 Oct
CT4		Time: 8:45- 10:15

Special Topics in Electromagnetic & Quantum

Session chairs:
Tavakol Pakizeh, Mahmoud Shahabadi, Vahid Yazdanian

Paper id	Title of paper	Authors
1094	Public Safety Assessment of Radio Frequency Electromagnetic Exposure	Narges Noori
1133	Exploring Fourier Neural Operators for Electromagnetic Wave Propagation Analysis	Arefeh Nikdast Amir Ahmad Shishegar
1229	Multicore Photonic Crystal Fiber Plasmonic Sensor	Parisa Borjikhani Nosrat Granpayeh Babak Nasersharif
1093	Deep Learning for Electromagnetic Metamaterial Inverse Design	Ali Nezaratizadeh Seyed Mohammad Hashemi Mohammad Bod
1192	An efficient design of a Crossbar Switch for Banyan Network and Nano Communication based on QCA technology	Saeid Seyedi Hatam Abdoli

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Thursday	Hall: H3	Date: 10 Oct
IT2		Time: 8:45- 10:15
AI Application – AI-enabled services		
Session chairs: Ehsan Arianyan, Hadi Moradi, Behzad Moshiri		

Paper id	Title of paper	Authors
1100	Cryptocurrency volatility prediction based on price, return and volatility cross-correlation using LSTM	Masoud Omidvari Abarghouie Sasan H. Alizadeh Ahmad Khademzadeh
1179	Automotive Radar Simulator Based on Ray-Tracing and Machine Learning	Jamal Kazazi Alireza Mahdavi Mahmoud Kamarei Mohammad Fakharzadeh
1267	Optimizing Smart Parking Solutions in Vehicle-to-Vehicle Networks	Alireza Yari Pouya Fattolahzdeh
1108	Artificial Intelligence-assisted Software Defined Networking for Securing ITS in Smart Cities	Ashray Sheth Bansri Choxi Chinmay Trivedi Rajesh Gupta Sudeep Tanwar Hossein Shahinzadeh Shohreh Azani
1183	An Efficient Motor Imagery BCI Classification Architecture Using Non-linear Network Tuning suitable for Cloud-Edge Environments	Abolfazl Danayi Hamid Soltanian-Zadeh

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Thursday	Hall: H1	Date: 10 Oct
IT3		Time: 11:00- 12:15

AI Application – AI-enabled services

Session chairs: Mohammad Shahram Moin, , Javad Shaygan Fard, Fattaneh Taghiyareh

Paper id	Title of paper	Authors
1132	SegLoc: Visual Self-supervised Learning Scheme for Dense Prediction Tasks of Security Inspection X-ray Images	Shervin Halat Mohammad Rahmati Ehsan Nazerfard
1149	Detection of Customer Satisfaction in In-Person Telecommunication Services Using Automated Facial Image Analysis with Artificial Intelligence	Hadiseh ArabGangan Mehrdad Rohani Seyed Ali Hosseini Alireza Mansouri
1255	Effect of Short-Form Videos on Student Attention	Mohsen Mahmoudi Fattaneh Taghiyare Kianosh Arian
1071	Exploring Feature Map Correlations for Effective Fake Face Detection	Narges Honarjoo Fatemeh Taher Azadeh Mansouri
1025	Detecting Human Attention States Exploiting an Intelligent Approach Combining Fuzzy Inference System and Support Vector Regression	Sajedeh Olyaee Gholam Ali Montazer

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Thursday	Hall: H2	Date: 10 Oct
SEC		Time: 11:00- 12:15

Security		
Session chairs: Hossein Gharaee Garakani, Babak Sadeghian, Hamid Reza Shahriari		

Paper id	Title of paper	Authors
1022	Detection of Phishing Attacks in Iranian E-Banking Websites Using a Neuro-Fuzzy System	Yeganeh Sattari Gholam Ali Montazer
1030	Advanced Automated Vulnerability Scoring: Improving Performance with a Fine-Tuned BERT-CNN Model	Seyedeh Leili Mirtaheri Andrea Pugliese Narges Movahed AmirHossein Majd
1106	Classification of legal and illegal sites using transfer learning based on features extracted from URLs	Majid Nezarat Erfan Khedersolh HadiShahriar Shahhoseini
1186	FL-ProtectX: Combating Label flipping in complex multi-agent environments	Mohammad Ali Zamani Fatemeh Amiri Pooya Jamshidi Seyed Mahdi Hosseini Nasser Yazdani
1014	Lateral movement detection through a heteregenous GNN model of kernel-level log	Faezeh Alizadeh Mohammad Khansari Abouzar Arabsorkhi

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Thursday	Hall: H3	Date: 10 Oct
CT5		Time: 11:00- 12:15
Devices in Microwaves, MMW and THz		
Session chairs: Reza Bahri, Vahid Nayyeri, Hossein Zargar		
Paper id	**Title of paper**	**Authors**
1003	RHC-Based Systematic Design of a Wide-Angle Periodic Coded THz Reflectarray	Pezhman Yousefi Ali Khajeh Alireza Yahaghi Keyhan Hosseini
1040	Compact Dual-Band Transmission-Reflection Modes Polarization Rotation Metasurface	Aysan Yousefpour Changiz Ghobadi Javad Nourinia Keyhan Hosseini Mohsen Karamirad Bahman Mohammadi
1119	Multi-functional and multi-band reflective polarization converter based on an asymmetric metasurface in the terahertz band	Hamed Eyvazlou Fatemeh Abbasian Nosrat Granpayeh Zahra Ghattan Kashani
1142	Three Degrees of Freedom Cells and a Perforated Dielectric for Wideband Reflectarray Fabrication	Mahdieh Bozorgi Mahmood Rafaei-Booket Soroosh Ghaffari
1103	Design and Analysis of a THz Topological Frequency-Tunable Waveguide based on Valleytronics	Mohammadreza Moeini Vahid Ahmadi
1271	Design and Implementation of a High-Efficiency 5W Ku-Band Power Amplifier Using a Bare Die GaN HEMT for Satellite Uplink Applications	Ehsan Rafiei Amin Azimi Vahid Nayyeri Roghieh Karimzadeh Baee

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Thursday	Hall: Main hall	Date: 10 Oct
CT6		Time: 14:30- 16:00

AI Application – AI-enabled services

Session chairs: Babak Khalaj, Abbas Mohammadi, Houman Zarrabi

Paper id	Title of paper	Authors
1018	Enhancing NTMA with Simultaneous Multi-QoS Parameter Prediction using Transformer-Based Deep Learning	S.Mozhgan Rahmatinia Seyed Amin Hosseini seno
1031	Synthetic Collision-Prone Trajectory Data Generation Using CTGAN for Connected Autonomous Vehicles	Ali Samanipour Reza Javidan Omid Bushehrian
1205	A method of the Free rider detection in peer-to-peer Video Streaming Networks Using Convolutional Neural Networks	Mohammad Mohammadi Nasab
1176	NOMA-SWIPT optimization with PSO and machine learning algorithm	Arshia Saeidifar Khashayar Saremi Bahareh Akhbari

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Thursday	Hall: H1	Date: 10 Oct
CT7		Time: 14:30- 16:00

	Antennas and Devices for Wireless Comm.	

Session chairs:
Hadi Aliakbarian, Reza Faraj-Dana, Narges Nouri

Paper id	Title of paper	Authors
1080	Broadcast beam synthesis in an 8T8R array in TD-LTE and Sub-6GHz 5G band	Atiyesadat Seyyedsabour Reza Asadi Mehdi Taherkhani Hadi Aliakbarian
1148	A Sparse Multi-static Circular Array for Millimeter Wave Imaging system	Mohammad Reza Moravejolahkami Hojatollah Zamani Mohammad Fakharzadeh
1135	Wide-Band Dual-Polarized BTS Antenna Using Crossed-Dipole with Parasitic Elements	Hamid Zakerifar Javad Nourinia Changiz Ghobadi
1145	Reconfigurable and Tunable Iris Filter Based on Plasma Technology	Atefeh Ashrafian Fatemeh Sadeghikia Jalil agha Rashed mohassel
1218	MIMO Transceiver with Ultra-Power-Efficient Analog-Based Processing Toward Tbps Wireless Communication	Mir Mahdi Safari Jafar Pourrostam Seyed Hosein Mousavi
1058	Capacity Maximization for Double Reconfigurable Intelligent Surface -Assisted MIMO System	Mina Jadidi Kamal Mohamed-Pour Ahmad Sirojuddin

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Thursday	Hall: H3	Date: 10 Oct
IT4		Time: 14:30- 16:00
Services and Platforms		
Session chairs: Mohammad Reza Ahmadi, Reza Azmi, Eslam Nazemi		
Paper id	**Title of paper**	**Authors**
1061	CNN Accelerator Adapted to Quasi Structured Pruning and Dense Mode Using FPGA	Hossein Gharaee
1238	Trust Analysis Improvement Through Deep Learning for Signed Social Networks	Shayan Karami Fattaneh Taghiyareh
1026	Measuring the social influence for retweet behavior prediction in microblogging network	Rahebeh Mojtahedi safari Amir Masoud Rahmani Sasan H.Alizaeh
1079	Analysis of Half-Duplex Two-Node Slotted ALOHA Network with Asynchronous Traffic	Seyed Ali Hashemian Farid Ashtiani