Mohammad Reza Javan

Curriculum Vitae

Personal Information

- Marital Status: Married
- Nationality: Iranian
- Phone: +989155016548
- Email: javan1378 [at] yahoo [dot] com

Education

2007 - 2012 **Ph.D. in Electrical Engineering, Communication Systems**, *Tarbiat Modares University*, *Department of Electrical and Computer Engineering*, Tehran, Iran.

Ph.D. Thesis, *Distributed Joint and Efficient Allocation of Resources in Wireless Data Networks*, Supervisor: Dr. Ahmad Reza Sharafat.

2003 - 2006 **M.Sc. in Electrical Engineering, Electronics**, Sharif University of Technology, Department of Electrical Engineering, Tehran, Iran.

M.Sc. Thesis, *Moving Object Detection and its Application to Video Compression*, Supervisor: Dr. Mahmoud Tabandeh and Dr. Farrokh Marvasti.

1999 - 2003 **B.Sc. in Electrical Engineering, Electronics**, *Shahid Beheshti University, Department of Electrical and Computer Engineering*, Tehran, Iran.

B.Sc. Project, *FSK Demodulator Design with AD-PLL and its implementation on FPGA ICs*, Supervisor: Dr. Omid Hashemipour.

Research Interests

- 6G and Beyond Wireless Network Design
- Vehicular Networks
- Cloud and Edge Computing
- Network Virtualization and Network Function Virtualization Embedding/Placement
- Unmanned Aerial Vehicle (UAV) Communications Network Design
- Internet of Things
- Application of Machine Learning Methods in Wireless Network Design
- Optimization Methods and Game Theory for Wireless Network Design
- Molecular Communications

Professional Experiences

Feb. 2006 - Iran Telecommunication Research Center (ITRC), .

Dec. 2008 - Wireless Innovation Lab: Tarbiat Modares Unity - Mobile Communication of Iran, Tehran Oct. 2012 (MCI), .

Since Sept. Faculty Member, Shahrood University of Technology, Shahrood, Semnan, Iran.

2012

Dec. 2008

Associate Professor, Communications, 2019.

Vice Dean of the Department of Electrical Engineering, 2021.

Dean of the Department of Electrical Engineering, 2022.

Technical Projects and Activities

Molecular Communication Nanonetworks, Shahrood University of Technology - Iran national Science 14) foundation: Science Deputy of Presidency, Executive/Principal Investigator, 2021–2024.

- 13) Design and Optimization of Transmitter and Receiver for Molecular Communication, Tarbiat Modares University - Iran national Science foundation: Science Deputy of Presidency, Co-Investigator, 2019– 2021.
- 12) 5G Road Map, Wireless Innovation Lab: Tarbiat Modares University Mobile Communication of Iran, Tehran (MCI), Technical Advisor and Cooperator, 2018–2020.
- 11) Talks and Worksshops on 5G Network Design, Wireless Innovation Lab: Tarbiat Modares University - Mobile Communication of Iran, Tehran (MCI), 2019.
- 10) Efficient Resource Allocation in Software Defined Wireless Networks, DFG Program: Iran-Germany, Wireless Innovation Lab: Tarbiat Modares University, Iran TU Dresden, Germany, 2019–Current.
- 9) 5G Optimization Day Workshop, ICT Research Institute (ITRC), 2019.
- 8) 5G Testbed, Wireless Innovation Lab: Tarbiat Modares University Mobile Communication of Iran, Tehran (MCI), 2018.
- 7) Radio Resource Allocation in NOMA and mm-Wave Based 5G Networks with Coverage Probability Constraint, Shahrood University of Technology - Iran national Science foundation: Science Deputy of Presidency, Executive/Principal Investigator, 2016–2018.
- 6) Quantized Secure Resource Allocation in Relay-Assisted OFDMA networks Based on Imperfect CDI, Shahrood University of Technology - Iran national Science foundation: Science Deputy of Presidency, Executive/Principal Investigator, 2014–2016.
- 5) Software Development for Monitoring and Adjusting BSS and NSS Parameters in GSM Networks, Wireless Innovation Lab: Tarbiat Modares University - Mobile Communication of Iran, Tehran (MCI), Technical Manager and Cooperator, 2011–2013.

- 4) Software Development for KPI Evaluation in GSM Networks, Wireless Innovation Lab: Tarbiat Modares University Mobile Communication of Iran, Tehran (MCI), Technical Manager and Cooperator, 2009–2011.
- 3) Software Development for Frequency Hopping in GSM Networks, Wireless Innovation Lab: Tarbiat Modares University - Mobile Communication of Iran, Tehran (MCI), Technical Manager and Cooperator, 2009–2011.
- 2) Network Security: Architecture and Designs, Iran Telecommunication Research Center (ITRC), Cooperator, 2008–2009.
- 1) Next Generation Networks: Designs and Architecture, Iran Telecommunication Research Center (ITRC), Cooperator, 2006–2008.

Teaching Experiences

Graduate

- Random Processes
- Wireless Communications
- Information Theory
- Advanced Communications Theory

Under Graduate

- Communications I
- Data Communications Networks
- Digital Systems
- Statistics and Probabilities
- C Programming

Publications and Patents

Patents

- Iran Patent Mohammad Reza Javan and Ahmad Reza Sharafat, A Protocol for joint and Distributed Allocation of Data Rate, Transmit Power, and Base Station Using pricing Mechanism to Maintain Users' QoS, Patent No. 69618.
- Iran Patent Mohammad Reza Javan and Ahmad Reza Sharafat, Distributed and Opportunistic Power Control Technique for Multi-carrier Interference Channels, Patent No. 63696.

Journal Papers

- [55] Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, Hamid Saeedi, Eduard A. Jorswieck, and Nizar Zorba, 'Low Complexity and Mobility-aware Robust Radio, Storage, Computing, and Cost Management for Cellular Vehicular Network", Accepted and To appear in IEEE Transactions on Vehicular Technology, 2024.
- [54] Marziyeh Karkhaneh, Sajedeh Norouzi, Mohammad R. Abedi, Nader Mokari, Mohammad R. Javan, Hamid Saeedi, Eduard A. Jorswieck, 'Implementation Insights of Robust Dynamic Spectrum Sharing for Heterogeneous Services in Non-Standalone 5G", To appear in IEEE Open Journal of the Communications Society, 2024.
- [53] Maryam Ansarifard, Nader Mokari, Mohammadreza Javan, Hamid Saeedi, and Eduard A. Jorswieck, 'AI-Based Radio and Computing Resource Allocation and Path Planning in NOMA NTNs: Aol Minimization Under CSI Uncertainty", To appear in IEEE Transactions on Vehicular Technology, 2024.
- [52] Mohammad Reza Abedi, Nader Mokari, Mohammad Reza Javan, Hamid Saeedi, Eduard A. Jorswieck, and Halim Yanikomeroglu, "Safety-Aware Age-of-Information (S-AoI) for Collision Risk Minimization in Cell-Free mMIMO Platooning Networks", IEEE Transactions on Network and Service Management, vol. 21, no. 3, pp. 3035-3053, 2024.
- [51] Hussein M. Hariz, Saeed Sheikhzadeh, Nader Mokari, Mohammad R. Javan, B. Abbasi-Arand, and Eduard A. Jorswieck, "Al-Based Radio Resource Management and Trajectory Design for IRS-UAV-Assisted PD-NOMA Communication", IEEE Transactions on Network and Service Management, vol. 21, no. 3, pp. 3385-3400, 2024.
- [50] Roya Paridar, Mohammad Reza Javan, Nader Mokari, and Eduard A. Jorswieck, "On the Reception Process of Molecular Communication-Based Drug Delivery", IEEE Access, vol. 12, pp. 24217-24231, 2024.
- [49] Mohammad Parvini, Mohammad Reza Javan, Nader Mokari, Bijan Abbasi, and Eduard A. Jorswieck, 'Aol-Aware Resource Allocation for Platoon-Based C-V2X Networks via Multi-Agent Multi-Task Reinforcement Learning", IEEE Transactions on Vehicular Technology, vol. 72, no. 8, pp. 9880-9896, 2023.
- [48] Mohammad Reza Abedi, Mohammad Reza Javan, Mohsen Pourghasemian, Nader Mokari, and Eduard A. Jorswieck, "Al-Assisted Dynamic Frame Structure With Intelligent Puncturing Schemes for 5G Networks", IEEE Access, vol. 11, pp. 113995-114012, 2023.

- [47] Amir Gharehgoli, Ali Nouruzi, Nader Mokari, Paeiz Azmi, Mohammad Reza Javan, and Eduard A. Jorswieck, "Al-based Resource Allocation in End-to-End Network Slicing under Demand and CSI Uncertainties", IEEE Transactions on Network and Service Management, vol. 20, no. 3, pp. 3630-3651, 2023.
- [46] Mohammad Parvini, Amir Hossein Zarif, Ali Nouruzi, Nader Mokari, Mohammad Reza Javan, Bijan Abbasi, Amir Ghasemi, and Halim Yanikomeroglu, 'Spectrum Sharing Schemes From 4G to 5G and Beyond: Protocol Flow, Regulation, Ecosystem, Economic", IEEE Open Journal of the Communications Society, vol. 4, pp. 464-517, 2023.
- [45] Mohsen Pourghasemian, Mohammad Reza Abedi, Shima Salar Hosseini, Nader Mokari, Mohammad Reza Javan, and Eduard A. Jorswieck, "AI-Based Mobility-Aware Energy Efficient Resource Allocation and Trajectory Design for NFV Enabled Aerial Networks", IEEE Transactions on Green Communications and Networking, vol. 7, no. 1, pp. 281-297, 2023.
- [44] Mitra Rezaei, Hamid Khoshfekr Rudsari, Mohammad Reza Javan, Nader Mokari, Eduard A. Jorswieck, and Mahdi Orooji, "Molecular Communication Transmitter Design in Limited-Capacity Storage Regime", IEEE Transactions on NanoBioscience, vol. 22, no. 2, pp. 212-222, 2023.
- [43] Amir Hossein Zarif, Paeiz Azmi, Nader Mokari, Mohammad Reza Javan, and Eduard Jorswieck, "Aol Minimization in Energy Harvesting and Spectrum Sharing Enabled 6G Networks", IEEE Transactions on Green Communications and Networking, vol. 6, no. 4, pp. 2043-2054, 2023.
- [42] Mohammad Reza Maleki, Mohammad Robat Mili, Mohammad Reza Javan, Nader Mokari, and Eduard A. Jorswieck, "Multi-Agent Reinforcement Learning Trajectory Design and Two-Stage Resource Management in CoMP UAV VLC Networks", IEEE Transactions on Communications, vol. 70, no. 11, pp. 7464-7476, 2022.
- [41] Ali Nouruzi, Abolfazl Zakeri, Mohamad Reza Javan, Nader Mokari, Rasheed Hussain, and S. M. Ahsan Kazmi, "Online Service Provisioning in NFV-enabled Networks Using Deep Reinforcement Learning", IEEE Transactions on Network and Service Management, vol. 19, no. 3, pp. 3276-3289, 2022.
- [40] Shima Salar Hosseini, Mohammad Reza Javan, and Ali Nazari, "Multicasting in NOMA-based UAV networks: Path design and throughput maximisation", IET Communications, vol. 16, no. 14, pp. 1708-1723, 2022.
- [39] Sepehr Rezvani, Eduard A. Jorswieck, Nader Mokari, Mohammad R. Javan, "Optimal SIC Ordering and Power Allocation in Downlink Multi-Cell NOMA Systems", IEEE Transactions on Wireless Communications, vol. 21, no. 6, pp. 3553-3569, 2022.
- [38] Saeed Sheikhzadeh, Mohsen Pourghasemian, Mohammad R. Javan, Nader Mokari, and Eduard A. Jorswieck, "Al-Based Secure NOMA and Cognitive Radio enabled Green Communications: Channel State Information and Battery Value Uncertainties", IEEE Transactions on Green Communications and Networking, vol. 6, no. 2, pp. 1037-1054, 2022.
- [37] Mohsen Tajallifar, Sina Ebrahimi, Mohammad Reza Javan, Nader Mokari, and Luca Chiaraviglio, "Energy-Efficient Task Offloading Under E2E Latency Constraints", IEEE Transactions on Communications, vol. 70, no. 3, pp. 1711-1725, 2022.

- [36] Maryam Moghimi, Abolfazl Zakeri, Mohammad Reza Javan, Nader Mokari, and Derrick Wing Kwan Ng, "Joint Radio Resource Allocation and Cooperative Caching in PD-NOMA-Based HetNets", IEEE Transactions on Mobile Computing, vol. 21, no. 6, pp. 2029-2044, 2022.
- [35] Amirhossein Shaghaghi, Abolfazl Zakeri, Nader Mokari, Mohammad Reza Javan, Mohammad Behdadfar, and Eduard A Jorswieck, "Proactive and Aol-aware Failure Recovery for Stateful NFV-enabled Zero-Touch 6G Networks: Model-Free DRL Approach", IEEE Transactions on Network and Service Management, vol. 19, no. 1, pp. 437-451, 2022.
- [34] Ata Khalili, Ehsan Mohammadi Monfared, Shayan Zargari, Mohammad Reza Javan, Nader Mokari, and Eduard A. Jorswieck, "Resource Management for Transmit Power Minimization in UAV-Assisted RIS HetNets Supported by Dual Connectivity", IEEE Transactions on Wireless Communications, vol. 21, no. 3, pp. 1806-1822, 2022.
- [33] F. Arian, M. R. Javan, and N. Mokari, "Secure green D2D communication in OFDMA based networks with imperfect channel knowledge", Wireless Networks, vol. 27, pp. 3147–3164, 2021.
- [32] Abolfazl Zakeri, Ata Khalili, Mohammad Reza Javan, Nader Mokari, and Eduard A Jorswieck, "Robust Energy-Efficient Resource Management, SIC Ordering, and Beamforming Design for MC MISO-NOMA Enabled 6G", IEEE Transactions on Signal Processing, vol. 69, pp. 2481-2498, 2021.
- [31] Sepehr Rezvani, Nader Mokari, Mohammad R. Javan, and Eduard A. Jorswieck, "Resource Allocation in Virtualized CoMP-NOMA HetNets: Multi-Connectivity for Joint Transmission", IEEE Transactions on Communications, vol. 69, no. 6, pp. 4172-4185, 2021.
- [30] Atefeh Rezaei, Paeiz Azmi, Nader Mokari Yamchi, Mohammad Reza Javan, and Halim Yanikomeroglu, "Robust Resource Allocation for Cooperative MISO-NOMA-Based Heterogeneous Networks", IEEE Transactions on Communications, vol. 69, no. 6, pp. 3864-3878, 2021.
- [29] Hamid Khoshfekr Rudsari, Mohammad Reza Javan, Mahdi Orooji, Nader Mokari, and Eduard A. Jorswieck, "TDMA-MTMR-Based Molecular Communication With Ligand-Binding Reception", IEEE Transactions on Molecular, Biological and Multi-Scale Communications, vol. 7, no. 2, pp. 111-116, 2021.
- [28] Narges Gholipoor, Saeedeh Parsaeefard, Mohammad Reza Javan, Nader Mokari, Hamid Saeedi, and Hossein Pishro-Nik, "Resource Management and Admission Control for Tactile Internet in Next Generation of Radio Access Network", IEEE Access, vol. 8, pp. 136261-136277, 2020.
- [27] Hamid Khoshfekr Rudsari, Mohammad Reza Javan, Mahdi Orooji, Nader Mokari, and Eduard A. Jorswieck, "Multiple-Type Transmission Multiple-Type Reception Framework on Molecular Communication", IEEE Wireless Communications Letters, vol. 9, no. 11, pp. 1825-1829, November 2020.
- [26] Mohammad R. Abedi, Mohammad R. Javan, Nader Mokari, and Halim Yanikomeroglu, "3D-MIMO Dual Communications in SCMA-Based Secure HetNets", IEEE Transactions on Vehicular Technology, vol. 69, no. 8, pp. 8499-8513, August 2020.

- [25] Arman Azizi, Saeedeh Parsaeefard, Mohamad Reza Javan, Nader Mokari, and Halim Yanikomeroglu, "Profit Maximization in 5G+ Networks with Heterogeneous Aerial and Ground Base Stations", IEEE Transactions on Mobile Computing, vol. 19, no. 10, pp. 2445-2460, October 2020.
- [24] Sepehr Rezvani, Nader Mokari, Mohammad Reza Javan, and Eduard Jorswieck, "Fairness and Transmission-Aware Caching and Delivery Policies in OFDMA-Based HetNets", IEEE Transactions on Mobile Computing, vol. 19, no. 2, pp. 331-346, February 2020.
- [23] **Saeed Sheikhzadeh, Mohammad R. Javan, and Nader Mokari**, "Cooperative multiple access cognitive radio transmission with renewable energy sources", Physical Communication, vol. 40, pp. 1-15, 2020.
- [22] Ali Nazari, Mohammad Reza Javan, and Shima Salar Hosseini, "Resource allocation in power domain NOMA-based cooperative multicell networks", IET Communications, vol. 14, no. 7, pp. 1162-1168, 2020.
- [21] Hamid Khoshfekr Rudsari, Nader Mokari, Mohammad Reza Javan, Eduard A. Jorswieck, and Mahdi Orooji, "Drug Release Management for Dynamic TDMA-Based Molecular Communication", IEEE Transactions on Molecular, Biological and Multi-Scale Communications, vol. 5, no. 3, pp. 233-246, 2019.
- [20] Mohammadreza Abedi, Nader Mokari, Mohammad Reza Javan, and Eduard A. Jorswieck, "Single or Multiple Frames Content Delivery for Next-Generation Networks?", IEEE Access, vol. 7, pp. 152501-152521, 2019.
- [19] **Farshad Rostami and Mohammad Reza Javan**, "Outage and Delay Performance of Content Caching in Two-Tier Cooperative Cellular Networks", IET Communications, vol. 13, no. 16, pp. 2492-2499, 2019.
- [18] Sepehr Rezvani, Saeedeh Parsaeefard, Nader Mokari, Mohamad Reza Javan, and Halim Yanikomeroglu, "Cooperative Multi-Bitrate Video Caching and Transcoding in Multicarrier NOMA-Assisted Heterogeneous Virtualized MEC Networks", IEEE Access, vol. 7, pp. 93511 -93536, 2019.
- [17] Mohammad Moltafet, Saeedeh Parsaeefard, Mohammad. R Javan, Nader Mokari, "Robust Radio Resource Allocation in MISO-SCMA Assisted C-RAN in 5G Networks", IEEE Transactions on Vehicular Technology, vol. 68, no. 6, pp. 5758-5768, June 2019.
- [16] Mohammad Moltafet, Paeiz Azmi, Mohammad. R Javan, Nader Mokari, and Ali Mokdad, "Optimal Radio Resource Allocation to Achieve Low BER in PD-NOMA-Based Heterogeneous Cellular Networks", Transactions on Emerging Telecommunications Technologies, vol. 30, no. 5, May 2019.
- [15] Mohammad Moltafet, Paeiz Azmi, Nader Mokari, Mohammad Reza Javan, and Ali Mokdad, "Optimal and fair energy efficient resource allocation for energy harvesting enabled-PD-NOMA based HetNets", IEEE Transactions on Wireless Communications, vol. 17, no. 3, pp. 2054-2067, March 2018.
- [14] Mohammad Moltafet1, Nader Mokari, Mohammad R. Javan, Hamid Saeedi, and Hossein Pishro-Nik, "A new multiple access technique for 5G: Power domain sparse code multiple access (PSMA)", IEEE Access, vol. 6, pp. 747-759, 2018.

- [13] Mohammad Moltafet, Nader Mokari Yamchi, Mohammad Reza Javan, and Paeiz Azmi, "Comparison study between NOMA and SCMA", IEEE Transactions on Vehicular Technology, vol. 67, no. 2, pp. 1830-1834, February 2018.
- [12] Sonia Naderi and Mohammad Reza Javan, "Outage analysis of the link selection for secure d2d communications with untrusted relay", Turkish Journal of Electrical Engineering and Computer Sciences, vol. 25, no. 5, pp. 3787-3797, October 2017.
- [11] Faezeh Alavi, Nader Mokari, Mohammad R. Javan, and Kanapathippillai Cumanan, "limited feedback scheme for device to device communications in 5g cellular networks with reliability and cellular secrecy outage constraints", IEEE Transactions on Vehicular Technology, vol. 66, no. 9, pp. 8072-8085, September 2017.
- [10] Mohammad R. Abedi, Nader Mokari, Mohammad R. Javan, and Halim Yanikomeroglu, "Secure communication in OFDMA based cognitive radio networks: An incentivized secondary network coexistence approach", IEEE Transactions on Vehicular Technology, vol. 66, no. 2, pp. 1171-1185, February 2017.
- [9] Mohammad R. Javan, Nader Mokari, Faezeh Alavi, and Ali Rahmati, "Resource allocation in decode-and-forward cooperative communications networks with limited rate feedback channel", IEEE Transactions on Vehicular Technology, vol. 66, no. 1, pp. 256-267, January 2017.
- [8] Mohammad R. Abedi, Nader Mokari, Mohammad R. Javan, and Halim Yanikomeroglu, "Limited rate feedback scheme for resource allocation in secure relay-assisted OFDMA networks", IEEE Transactions on Wireless Communications, vol. 15, no. 4, pp. 2604-2618, April 2016.
- [7] S. Sheikhzadeh and Mohammad Reza Javan, "Key Technologies in 5g: Air Interface", The Modares Journal of Electrical Engineering, vol. 16, no. 2, pp. 250-261, 2016.
- [6] **S. Sheikhzadeh and Mohammad Reza Javan**, *"Key Technologies in 5g: Network Architecture"*, *The Modares Journal of Electrical Engineering*, vol. 16, no. 2, pp. 38-49, 2016.
- [5] **Mohammad Reza Javan**, "Secure Communications in OFDMA networks with active eavesdropper", The Modares Journal of Electrical Engineering, vol. 13, no. 2, pp. 23-28, 2013.
- [4] Mohammad Reza Javan and Ahmad Reza Sharafat, "Interference-dependent opportunistic power control for multi-carrier interference channels", IEEE Transactions on Vehicular Technology, vol. 63, no. 2, pp. 953-958, February 2014.
- [3] Mohammad Reza Javan and Ahmad Reza Sharafat, "Distributed joint resource allocation in primary and cognitive wireless networks", IEEE Transactions on Communications, vol. 61, no. 5, pp. 1708-1719, May 2013.
- [2] Mohammad Reza Javan and Ahmad Reza Sharafat, "Efficient and distributed SINR-based resource allocation and base station assignment in wireless networks", IEEE Transactions on Communications, vol. 59, no. 12, pp. 3388-3399, Dec. 2011.
- Nader Mokari, Mohammad Reza Javan, and Keivan Navaie, "Cross-layer resource allocation in OFDMA systems for heterogeneous traffic with imperfect CSI", IEEE Transaction on Vehicular Technology, vol. 59, no. 2, pp. 1011-1017, Feb 2010.

Conference Papers

- [26] Hossein Khodi, Paeiz Azmi, Nader Mokari, Mohammadreza Javan, Hamid Saeedi, and Murat Uysal, 'Age of Information Optimization for Multi-Hop VLC/RF IoT Sensor Networks", in 2024 IEEE Wireless Communications and Networking Conference (WCNC), 21-24 April 2024, Dubai, UAE.
- [25] Ali Nouruzi, Atefeh Rezaei, Ata Khalili, Nader Mokari, Mohammad Reza Javan, Eduard A. Jorswieck, and Halim Yanikomeroglu, 'Smart Resource Allocation Model via Artificial Intelligence in Software Defined 6G Networks", in 2021 17th International Symposium on Wireless Communication Systems (ISWCS), 6-9 Sept 2021, Berlin, Germany (Virtual Conference).
- [24] Mohammad Parvini, Mohammad Reza Javan, Nader Mokari, Bijan Abbasi Arand, and Eduard A. Jorswieck, "Aol Aware Radio Resource Management of Autonomous Platoons via Multi Agent Reinforcement Learning", in 2023 IEEE International Conference on Communications (ICC), 28 May–1 June 2023, Rome, Italy..
- [23] Sepehr Rezvani, Eduard A Jorswieck, Nader Mokari, and Mohammad R Javan, "Optimal Versus CSI-Based SIC Ordering in Downlink Multi-Cell NOMA Systems", in ICC 2021 IEEE International Conference on Communications, 14-23 June 2021, Montréal, Canada (Virtual Conference).
- [22] A. Zakeri, N. Gholipoor, M. Tajallifar, S. Ebrahimi, M. R. Javan, N. Mokari, A. R. Sharafat, "Digital Transformation VIA 5G: Deployment Plans", in 2020 ITU Kaleidoscope: Industry-Driven Digital Transformation (ITU K), 7-11 December 2020, Ha Noi, Vietnam. Best Paper Award
- [21] Narges Gholipoor, Saeedeh Parsaeefard, Mohammad Reza Javan, Nader Mokari, Hamid Saeedi, and Hossein Pishro-Nik, "Cloud-based Queuing Model for Tactile Internet in Next Generation of RAN", in 2020 IEEE 91st Vehicular Technology Conference (VTC2020-Spring), 25-28 May 2020, Antwerp, Belgium.
- [20] Farshad Rostami Ghadi, Ghosheh Abed Hodtani, and Mohammad Reza Javan, "Performance Analysis of Content Caching in Wireless Multi-Tier Heterogeneous Network with ARQ-Transmission", in The 28nd Iranian Conference on Electrical Engineering (ICEE 2020), 4 - 6 August 2014, Tabriz, Iran.
- [19] Mohammad R. Abedi, Mohammad R. Javan, Nader Mokari, and H. Yanikomeroglu, "Dual Communications in MIMO SCMA-Based Secure HetNets", in 2019 IEEE 30th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 8-11 September 2019, Istanbul, Turkey.
- [18] Mohammad R. Abedi, Nader Mokari, Mohammad R. Javan, and Eduard A. Jorswieck, "Robust and Secure Content Delivery in Energy and Spectrum Efficient Next-Generation Networks", in 2018 IEEE Globecom Workshops (GC Wkshps), 9-13 December 2018, Abu Dhabi, UAE.
- [17] Sepehr Rezvani, Nader Mokari, and Mohammad R. Javan, "Uplink Throughput Maximization in OFDMA-Based SWIPT Systems with Data Offloading", in The 26nd Iranian Conference on Electrical Engineering (ICEE 2018), 8 - 10 May 2018, Mashhad, Iran.
- [16] Saeed Sheikhzadeh, Mohammad R. Javan, and Nader Mokari, "Antenna selection for secure robust communication in MISO-OFDMA based heterogeneous cellular networks", in 2018 IEEE Wireless Communications and Networking Conference (WCNC), 15-18 April 2018, Barcelona, Spain.

- [15] Mohammed R. Javan and Nader Mokari, "Resource Allocation in Secure Full-Duplex D2D Communications Using Zero Forcing Beamforming", in The 26th Iranian Conference on Electrical Engineering (ICEE 2018), 8-10 May 2018, Mashhad, Iran.
- [14] Sepehr Rezvani, Nader Mokari, and Mohammad R. Javan, "Uplink Throughput Maximization in OFDMA-Based SWIPT Systems with Data Offloading", in The 26th Iranian Conference on Electrical Engineering (ICEE 2018), 8-10 May 2018, Mashhad, Iran.
- [13] M. Moltafet, N. Mokari, M. R. Javan, H. Saeedi, and H. Pishro-Nik, "PSMA for 5G: Network throughput analysis", in IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), 8-13 Oct 2017, Montreal, Canada.
- [12] Saeed Sheikhzadeh, Mohammed R. Javan, and Nader Mokari, "Radio resource allocation for physical-layer security in OFDMA based HetNets with unknown mode of adversary", in 2017 Iran Workshop on Communication and Information Theory (IWCIT), 3-4 May 2017, Tehran, Iran.
- [11] **S. Vatanpour and Mohammed R. Javan**, "A cooperative spectrum leasing scheme with guaranteed secrecy rate for primary link", in 8th International Symposium on Telecommunications (IST), 27-28 September 2016, Tehran, Iran.
- [10] Mohammed R. Javan, Saeed Sheikhzadeh, and Nader Mokari, "Secure communications in OFDMA decode and forward relay assisted networks in presence of multiple eavesdroppers", in 8th International Symposium on Telecommunications (IST), 27-28 September 2016, Tehran, Iran.
- [9] **S. Naderi, Mohammed R. Javan, and A. Aref**, "Secrecy outage analysis of cooperative amplify and forward relaying in device to device communications", in The 24nd Iranian Conference on Electrical Engineering (ICEE 2014), 10 12 May 2014, Shiraz, Iran.
- [8] **Mohammed R. Javan**, "Guaranteeing secure communication in OFDM network with an active eavesdropper", in 7th International Symposium on Telecommunications (IST), 27-28 September 2014, Tehran, Iran.
- [7] Mohammed R. Javan, "Pricing for Distributed Power Control in Multi-Carrier Systems", in The 22nd Iranian Conference on Electrical Engineering (ICEE 2014), 20 22 May 2014, Tehran, Iran.
- [6] Mohammed R. Javan and Nader Mokari, "Resource allocation for maximizing secrecy rate in presence of active eavesdropper", in *The 22nd Iranian Conference on Electrical Engineering (ICEE 2014)*, 20 22 May 2014, Tehran, Iran.
- [5] Nader Mokari, Mohammed R. Javan, and Keivan Navaie, "Resource allocation based on channel distribution information for elastic and streaming traffic in OFDMA networks: a heuristic algorithm", in Proceedings of the 70th IEEE Vehicular Technology Conference, 20 - 23 September 2009, Anchorage, Alaska.
- [4] Mohammad Reza Javan, Seyed Mahdi Bouzari, and Mahmoud Tabandeh, "Load Balancing in UTRAN by Bipartite Graphs", 4th European Conference on Circuits and Systems for Communications (ECCSC 2008), 10-11 July 2008.
- [3] Mohammad Reza Javan, Seyed Mahdi Bouzari, and Ahmad Salahi, "Efficient algorithm for load balancing", International Symposium on Signals, Circuits and Systems (ISSCS 2007), 13-14 July 2007.

- [2] Mohammad Reza Javan, Seyed Mahdi Bouzari, and Ahmad Salahi, "Fast and efficient Extraction of moving objects", International Symposium on Signals, Circuits and Systems (ISSCS 2007), 13-14 July 2007.
- Mohammad Reza Javan, Seyed Mahdi Bouzari, and Ahmad Salahi, "An efficient object Segmentation Algorithm for Surveillance Systems", International Symposium on Signals, Circuits and Systems (ISSCS 2007), 13-14 July 2007.

Reviewer

- Journals IEEE Transactions on Signal Processing, IEEE Transactions on Wireless Communications, IEEE Transactions on Communications (Exemplary Reviewer 2022), IEEE Transactions on Vehicular Technology, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Network and Service Management, IEEE Communications Letters (Exemplary Reviewer 2016), IET Communications, EURASIP Journal on Wireless Communications and Networking.
- Conferencess ICC, WCNC, VTC, PIMRC, GLOBECOM.

Academic and Professional Membership

- Since March. **IEEE Senior Member**. 2019
 - 2018 TPC member of IEEE GLOBCOM 2018 Workshop Conference.
 - 2019-2020 TPC member of 2019 and 2020 IEEE International Conference on Communications (ICC).
 - Since 2019 Associate Editor of EURASIP Journal on Wireless Communications and Networking.
 - 2021 Scientific Chair of 5th Iranian Conference on Communications Engineering (ICCE 2021).
- 2024-Ongoing Executive Chair of 10th International Conference on Signal Processing and Intelligent Systems (ICSPIS 2024).

References

- Dr. A. R. Sharafat, Tarbiat Modares University , Iran. Professor Email: ahmad.sharafat@gmail.com
- Professor **Dr. Eduard Jorswieck**, TU Dresden , Germany. Email: Eduard.Jorswieck@tu-dresden.de
- Professor **Dr. Halim Yanikomeroglu**, Carleton University, Canada. Email: halim@sce.carleton.ca
- Professor **Dr. P. Azmi**, Tarbiat Modares University, Iran. Email: pazmi@modares.ac.ir

Associate **Dr. H. Saeedi**, Tarbiat Modares University, Iran. Professor Email: hsaeedi@modares.ac.ir

Associate **Dr. Hossein Pishro-Nik**, University of Massachusetts Amherst, USA. Professor Email: pishro@ecs.umass.edu