MohammadJavad Salehi

List of Publications   **May 2024**

A- Peer-Reviewed Scientific Articles

A1- Journal Papers

[1]. Abolpour, M., Salehi, M. and Tölli, A. Resource Allocation for Multi-Antenna Coded Caching Systems with Dynamic User Behavior. IEEE Wireless Communications Letters, 2024.

[2]. Mahmoodi, H.B., Salehi, M. and Tölli, A. Low-Complexity Multi-Antenna Coded Caching Using Location-Aware Placement Delivery Arrays. IEEE Transactions on Wireless Communications, 2024.

[3]. Abolpour, M., Salehi, M. and Tölli, A. Cache-Aided Communications in MISO Networks with Dynamic User Behavior. IEEE Transactions on Wireless Communications, 2024.

[4]. Salehi M., Hooli K., Hulkkonen J. and Tölli A. Enhancing Next-Generation Extended Reality Applications with Coded Caching. IEEE Open Journal of the Communication Society, 2023.

[5]. Mahmoodi H.B., Salehi M. and Tölli A. Multi-antenna Coded Caching for Location-Dependent Content Delivery. IEEE Transactions on Wireless Communications. 2023.

[6]. Salehi M., Parrinello E., Shariatpanahi S.P., Elia P. and Tölli A. Low-complexity high-performance cyclic caching for large miso systems. IEEE Transactions on Wireless Communications. 2021.

[7]. Salehi M., Motahari S.A. and Khalaj B.H. On the Optimality of 0–1 Data Placement in Cache Networks. IEEE Transactions on Communications. 2017.

[8]. Roostaei T., Sadaghiani S., Park M.T., Mashhadi R., Nazeri A., Noshad S., Salehi M., Naghibzadeh M., Moghadasi A.N., Owji M., Doosti R. Channelopathy-related SCN10A gene variants predict cerebellar dysfunction in multiple sclerosis. Neurology. 2016.

A4- Conference Papers

[1]. Abolpour, M., Salehi, M., Mohajer, S., Shariatpanahi, S.P. and Tölli, A. Coded Multi-User Information Retrieval with a Multi-Antenna Helper Node. To appear in the 2024 IEEE International Symposium on Information Theory (ISIT) 2024.

[2]. NaseriTehrani M., Salehi M. and Tölli A. Multicast Transmission Design with Enhanced DoF for MIMO Coded Caching Systems. In the 2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2024.

[3]. Salehi M., NaseriTehrani M. and Tölli A. Multicast beamformer design for mimo coded caching systems. In the 2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2023.

[4]. Akcay K., Salehi M. and Caire G. Optimal Fairness Scheduling for Coded Caching in Multi-AP Wireless Local Area Networks. In the 2023 IEEE Global Communications Conference (GLOBECOM) 2023.

[5]. NaseriTehrani M., Salehi M. and Tölli A. Low-complexity Linear Multicast Beamforming for Cache-aided MIMO Communications. In the 2023 Asilomar Conference on Signals, Systems, and Computers.

[6]. Akcay K., Salehi M., Tölli A. and Caire G. Optimal Fairness Scheduling for Coded Caching in Multi-AP Multi-antenna WLAN. In the 2023 Asilomar Conference on Signals, Systems, and Computers.

[7]. Gamaethige S.R., Mahmoodi H.B., Salehi M., Suraweera H.A. and Tölli A. Reduced Complexity Multicast Beamforming and User Grouping for Multi-Antenna Coded Caching. In the 2023 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit).

[8]. Abolpour M., Salehi M. and Tölli A. Cache-Aided Communications in MISO Networks with Dynamic User Behavior: A Universal Solution. In the 2023 IEEE International Symposium on Information Theory (ISIT) 2023.

[9]. Mahmoodi H.B., Salehi M. and Tölli A. Asymmetric Multi-Antenna Coded Caching for Location-Dependent Content Delivery. In the 2022 IEEE Global Communications Conference (GLOBECOM) 2022.

[10]. Salehi M. and Tölli A. Multi-antenna Coded Caching at Finite-SNR: Breaking Down the Gain Structure. In the 2022 Asilomar Conference on Signals, Systems, and Computers.

[11]. Urabe A., Ishibashi K., Salehi M. and Tölli A. Beamforming Design for Wireless Coded Caching with Different Cache Sizes. In the 2022 IEEE 23rd International Workshop on Signal Processing Advances in Wireless Communication (SPAWC) 2022.

[12]. Abolpour M., Salehi M. and Tölli A. Coded Caching and Spatial Multiplexing Gain Trade-off in Dynamic MISO Networks. In the 2022 IEEE 23rd International Workshop on Signal Processing Advances in Wireless Communication (SPAWC) 2022.

[13]. Salehi M., Parrinello E., Mahmoodi H.B. and Tölli A. Low-Subpacketization Multi-Antenna Coded Caching for Dynamic Networks. In the 2022 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit) 2022.

[14]. Mahmoodi H.B., Salehi M. and Tölli A. Non-Symmetric Multi-Antenna Coded Caching for Location-Dependent Content Delivery. In the 2022 IEEE International Conference on Communications 2022.

[15]. Mahmoodi H.B., Gouda B., Salehi M. and Tölli A. Low-Complexity Multicast Beamforming for Multi-stream Multi-group Communications. In the 2021 IEEE Global Communications Conference (GLOBECOM) 2021.

[16]. Salehi M., Mahmoodi H.B. and Tölli A. A Low-Subpacketization High-Performance MIMO Coded Caching Scheme. In the 2021 International ITG Workshop on Smart Antennas (WSA) 2021.

[17]. Mahmoodi H.B., Salehi M. and Tölli A. Non-Symmetric Coded Caching for Location-Dependent Content Delivery. In the 2021 IEEE International Symposium on Information Theory (ISIT) 2021.

[18]. Salehi M. and Tölli A. Diagonal Multi-Antenna Coded Caching for Reduced Subpacketization. In the 2020 IEEE Global Communications Conference (GLOBECOM) 2020.

[19]. Salehi M., Tölli A. and Shariatpanahi S.P. A multi-antenna coded caching scheme with linear subpacketization. In the 2020 IEEE International Conference on Communications (ICC) 2020

[20]. Salehi M., Tölli A. and Shariatpanahi S.P. Coded Caching with Uneven Channels: A Quality of Experience Approach. In the 2020 IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) 2020.

[21]. Salehi M., Tölli A. and Shariatpanahi S.P. Subpacketization-Beamformer Interaction in Multi-Antenna Coded Caching. In the 2020 IEEE 2nd 6G Wireless Summit (6G SUMMIT) 2020.

[22]. Salehi M., Tölli A., Shariatpanahi S.P. and Kaleva J. Subpacketization-rate trade-off in multi-antenna coded caching. In the 2019 IEEE Global Communications Conference (GLOBECOM) 2019.

[23]. Salehi M., Motahari S.A., Khalaj B.H. and Shariatpanahi S.P. Content Delivery Networks: Interactions between storage/delay/cost. In the 2018 IEEE Iran Workshop on Communication and Information Theory (IWCIT).

[24]. Bagheri H., Salehi M., Barua B., Khalaj B.H. and Katz M. Energy and delay efficient strategies for content distribution using mobile-to-mobile cooperation. In 2013 IFIP Wireless Days (WD) 2013.

[25]. Bagheri H., Salehi M., Khalaj B.H. and Katz M. An energy-efficient leader selection algorithm for cooperative mobile clouds. In 2013 IFIP Wireless Days (WD) 2013.

[26]. Pari S.M., Salehi M., Noormohammadpour M., Khalaj B.H., Bagheri H. and Katz M. An incentive-based leader selection mechanism for mobile ad-hoc networks (MANETs). In 2013 IFIP Wireless Days (WD) 2013.

[27]. Pari S.M., Noormohammadpour M., Salehi M., Khalaj B.H., Bagheri H. and Katz M. A self-organizing approach to malicious detection in leader-based mobile ad-hoc networks. In 2013 IFIP Wireless Days (WD) 2013.

[28]. Salehi M., Khalaj B.H., Katz M., Fazelnia G., Karimi P. and Del Ser J. Mobile clouds: How to find opportunities. In 2012 IEEE 17th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD) 2012.

[29]. Salehi M., Khalaj B.H., Katz M., Fazelnia G. and Karimi P. Mobile cloud management: A new framework. In 2012 IEEE 23rd International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2012.

D- Publications intended for professional communities

D4- Published development or research report or study

[1]. Rajatheva N, Atzeni I, Bjornson E, Bourdoux A, Buzzi S, Dore JB, Erkucuk S, Fuentes M, Guan K, Hu Y, Huang X, et al. White paper on broadband connectivity in 6G. arXiv preprint arXiv:2004.14247. 2020 Apr 29.

G- Theses

G1- Bachelor Theses

[1]. Salehi, M., 2010, August. Bit Error Rate Implementation Using Xilinx FPGA. BSc Thesis, Electrical Engineering Department, Sharif University of Technology, Tehran, Iran.

G2- Graduate Theses

[1]. Salehi, M., 2018, August. Partial Coded Caching in Information-Centric Networks. Ph.D. Thesis, Electrical Engineering Department, Sharif University of Technology, Tehran, Iran.
[2]. Salehi, M., 2012, August. Resource Sharing in Mobile Clouds. MSc Thesis, Electrical Engineering Department, Sharif University of Technology, Tehran, Iran.