

# Mahdi Abbasi

## Curriculum Vitae

LIS Laboratory (CNRS UMR7020), Aix-Marseille University, France.  
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### Personal Information

Name	Mahdi Abbasi
Gender	Male
Birth date	1979/09/23
Marital Status	Married

### Current and Past Positions

2023-2024	Postdoctoral Fellowship, LIS laboratory, Aix-Marseille University, France.
2022-2023	Associate Professor, Department of Computer Engineering, Bu-Ali Sina University, Iran.
2021-2022	Postdoctoral Fellowship, LIS laboratory, Aix-Marseille University, France.
2019-2021	Associate Professor, Department of Computer Engineering, Bu-Ali Sina University, Iran.
2012-2019	Assistant Professor, Department of Computer Engineering, Bu-Ali Sina University, Iran.
2006-2012	Ph.D. Scholar, Computer Engineering, Department of Computer Engineering, University of Isfahan, Iran.
2002-2006	System Engineer, Gam Electronics Co. Tehran, Iran.

### Education

2006-2012	Ph.D. in Computer Engineering, Computer Engineering Department, University of Isfahan, Iran. Supervisor: Professor Ahmad R. Naghsh-Nilchi
2004-2006	M.Sc. in Computer Engineering, Computer Engineering Department, Sharif University of Technology, Iran. Supervisor: Professor Saeed Bagheri Shouraki
1997-2002	B.Sc. in Computer Engineering, Computer Engineering Department, Sharif University of Technology, Iran

### Academic Honors

2023	“World’s Top 2% Scientists” in 2023, published by Stanford University in collaboration with Elsevier on October 2024.
2023	“World’s Top 2% Scientists” in 2022, published by Stanford University in collaboration with Elsevier on October 2023.
2022	Distinguished Researcher of Computer Engineering Department, Bu-Ali Sina University, Hamedan, Iran.
2021	Top Researcher in the Hamedan Province in the field of Technology and Engineering, Ministry of the Interior of Iran.
2021	Distinguished Researcher of Engineering Faculty, Bu-Ali Sina University, Hamedan, Iran.
2020	Distinguished Researcher of Computer Engineering Department, Bu-Ali Sina University, Hamedan, Iran.
2017	Distinguished Lecturer of Computer Engineering Department Bu-Ali Sina University, Hamedan, Iran.

### Research Interests

- Machine Learning Architectures
- Fog/Edge Computing
- Optimization
- Acceleration
- Autonomic Computing

### Teaching Experience

2021-present	Network Optimization, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2021-present	Efficient Architecture Design for AI/ML, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2012-present	Computer Programming, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2012-present	Computer Architecture, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2012-present	Network Processors, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2016- present	Distributed Systems, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2016-2021	Parallel Computing, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2018-present	Synthesis and Optimization of Digital Systems, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2018-present	Advanced Computer Architecture, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2012-2020	Signal Processing, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2013-2020	Discrete Time Signal Processing, lecturer & Coordinator, Bu-Ali Sina University, Iran.
2006-2019	Microprocessor, lecturer & Coordinator, Bu-Ali Sina University, Hamedan University of Technology, Iran.
2006-2019	X86 Assembly, lecturer & Coordinator, Bu-Ali Sina University, Hamedan University of Technology, Iran.

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## Student Supervision (M.Sc.)

- [M1] **Effat Sakhaei**, recognizing the three-dimensional position of the human body using a graph-based semi-supervised method, 2014.
- [M2] **Sajad Mirzaei**, an algorithm to reduce the memory consumption by considering the upper and lower search bounds, 2015.
- [M3] **Shakoor Vakilian**, a trie-based packet classifier in TCAMs considering memory limits, 2015.
- [M4] **Milad Rafiee**, improving the performance of packet classification algorithms based on decision trees using GPU, 2016.
- [M5] **Soghra Agh-mohammdlou**, a new method of estimating the efficiency of packet classification algorithms, 2016.
- [M6] **Ali Najafi**, improving the efficiency of packet classification in tuple space algorithms using GPU, 2016.
- [M7] **Akram Khanmirzaee**, increasing the speed of memory-full packet classification using data structure techniques, 2016.
- [M8] **Saeed Asadrouz**, a traffic-aware method for classifying packets with the aim of reducing memory accesses, 2016.
- [M9] **Shima Maleki**, improving the flow table management mechanism in software-defined networks, 2017.
- [M10] **Azam Fazel Najaf-abadi**, improving the efficiency of packet classification in tuple space algorithm using GPU cluster, 2017.
- [M11] **Azad Shokrollahi**, improving the performance of decision tree-based package classification algorithms using GPU cluster, 2017.
- [M12] **Narges Rezaei**, presenting a call admission control method in 802.11n wireless networks with the help of SIP broker, 2018.
- [M13] **Fatemeh Sajjadian**, improving the efficiency of the cross-product packet classification algorithm by using GPU cluster, 2018.
- [M14] **Motahareh Afshari-Haghdooost**, parallelization of a preprocessing mechanism of NIDS using graphics processing unit, 2018.
- [M15] **Hajar Rezaei**, improving the performance of packet classification algorithms using leaf-pushing techniques, 2019.
- [M16] **Ehsan Mohammadi-Pasand**, an efficient mechanism for workload in fog computing processing considering delay and cost, 2020.
- [M17] **Mina Yaghoobi-Kia**, an efficient mechanism for workload distribution in fog computing considering energy and cost, 2020.
- [M18] **Saeedeh Vesaghati-Fazel**, a method to improve the bit-cut algorithm considering the memory criterion, 2020.
- [M19] **Navid Mousavi**, optimizing the efficiency of multiple pipeline architecture in packet classification, 2020.
- [M20] **Pouria Ahmadi**, optimal allocation of resources considering delay and energy in fog computing using game theory, 2022.
- [M21] **Soheila Hajilou**, optimization of energy consumption and delay of fog computing using game theory, 2022.
- [M22] **Fatemeh Danesh-Pajouh**, optimizing Nao robot routing using digital twins' implementation, 2022.
- [M23] **Bahareh Hamidi-Moheb**, an efficient mechanism to determine a function for load distribution in fog using LCS, 2022.
- [M24] **Leila Mirzaei**, an efficient mechanism to improve computations in machine learning using approximate computing, 2023.
- [M25] **Mohammad-Reza Pour-Hosseini**, Using tiny-ML models to QoS-aware workload distribution at the network edge, 2023.

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## Student Supervision (Ph.D.)

- [PhD1] **Ala Alavadi**, distributed MLs for optimal service placement in IoT networks, (2019-present).
- [PhD2] **Omid Jamshidi**, improving the efficiency of distributed deep neural networks and making them fault-tolerant using cognitive computations on network telemetry data (2019-present).
- [PhD3] **Fazeleh Tavassolian**, applying a meta-learning mechanism based on cross-layer cognition on the Internet of Things network to promote federated learning, (2019-present).
- [PhD4] **Raheleh Abbasi**, reliable NCFET-based synchronous transceivers with ultra-low power consumption for network-on-chip interconnects, (2022-present).
- [PhD5] **Ali Kiaei**, image processing in the vectorial differential domain, (2013-2017).

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## Community Services

### Journal Editorial Board Membership

- Academic Editor, Mobile Information Systems, (ISI)
- Academic Editor, Frontiers in High-Performance Computing (Scopus)
- Academic Editor, PLOS ONE (ISI)
- Regional Editor, ACM Transactions on WEB (ISI)
- Guest editor, SI, "Artificial Intelligence for Big Data management and optimization in network community", (JOEUC), (ISI)

### Conference Technical Program Committee Membership

- Fourth International Conference on Computer Games; Challenges and Opportunities (CGCO2019), Kashan, Iran, Feb. 21, 2020.
- Tenth EAI International Conference, CloudComp 2020, Qufu, China, Dec. 11–12, 2020.
- Ninth International Conference on Information Technology Convergence and Services, Zurich, Switzerland, Nov. 21-22, 2020.
- Fifth annual International Conference on Computer Games; Challenges and Opportunities (CGCO2020), Isfahan, Iran, Feb. 19, 2020.
- Fifth International Conference on Computer Games; Challenges and Opportunities (CGCO2020), Isfahan, Feb. 19-20, 2020.
- Tenth International Conference on Control, Modelling, Computing and Applications (CMCA 2021), Dubai, UEA, Feb. 20-21, 2021.
- Third international Conference on Machine Learning & Applications (CMLA 2021), Toronto, Canada, Sep. 25-26, 2021.
- Sixth International Conference on Computer Games; Challenges and Opportunities (CGCO2021), Isfahan, Feb. 18-19, 2021.
- Seventh International Conference on Computer Games; Challenges and Opportunities (CGCO2022), Isfahan, Feb. 24-25, 2022.

## Conference Organizing Program Committee Membership

- Eight International Conference on Information and Knowledge Technology (IKT2016), Hamedan, Iran, Sep. 7-8, 2016.

## Review activities

- IEEE Transactions on Intelligent Transportation Systems
- IEEE Communications
- IEEE Internet of Things
- IEEE Transactions on Image Processing
- Elsevier Parallel and distributed Computing
- Elsevier Computer Networks
- Elsevier Computer Communications
- Elsevier Future Generation Computer Systems
- Elsevier Networks and Computer Applications
- Elsevier Engineering Applications of Artificial Intelligence
- Elsevier Digital Communications and Networks
- Springer Supercomputing
- Springer Grid Computing
- Springer Cluster Computing
- Springer Multimedia Tools and Applications
- Springer Signal, Image, and Video-processing
- Springer Journal of Ambient Intelligence and Humanized Computing
- Springer International Journal of Intelligent Systems
- Wiley Concurrency and Computation, Practice and Experience

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## Institutional Responsibilities

2013- present	Scientific committee member and designer of Computer Architecture questions for Student Scientific Olympiad in Iran (from 2013-present).
2019- present	Head and director of the Computer Architecture Research Lab at Bu-Ali Sina University
2019- 2021	Member of the University Educational Evaluation Committee at Bu-Ali Sina University
2019- 2021	Deputy dean of engineering faculty (education) at Bu-Ali Sina University
2015- 2017	Deputy dean of Faculty of Engineering and Natural Resources (education) at Bu-Ali Sina University

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## Journal Publications

- [J1] F. Tavassolian, M. Abbasi, A. Taherkordi, M.R. Khosravi, "Applying a meta-learning mechanism based on cross-layer cognition on the Internet of Things network to promote federated learning", Tsinghua Science and Technology Journal, Accepted, 2023.
- [J2] M. Ghafari, H. Abdoli, M. Abbasi, Speeding up the execution-time of Crystals-Kyber PQC Algorithm on FPGA, Electronic and Cyber Defense, Accepted, Jan. 2023.
- [J3] Khaledian, M. Abbasi, H. Attar, Kh. Rezaei, "Improving Area-Based Quad-Trie Algorithm in Packet Classification for S-IoT Applications", Wireless Communications and Mobile Computing, Submitted, Jan 2023.
- [J4] Fazel, M. Abbasi, H. Attar, Kh. Rezaei, J. Taheri, A. Taherkordi, A. Shokrollahi, "High-performance flow classification of big data using hybrid CPU-GPU clusters of cloud environments", Tsinghua Science and Technology Journal, DOI: doi.org/10.26599/TST.2023.9010088, September 2023.
- [J5] Abolfazl Roshanpanah, Mahdi Abbasi<sup>1</sup>, Ayman Attar, Hani, Amer, Mohammad R. Khosravi, Ahmed Solyman, "An Electrical Impedance Imaging System towards Edge Intelligence for Non-destructive Testing of Concrete", Tsinghua Science and Technology, DOI: https://doi.org/10.26599/TST.2023.901004, July 2023.
- [J6] H. Attar, H. Issa, I. A. Elhaty, M. R. Khosravi, M. Abbasi, A. Solyman, "B5G Applications and Emerging Services in Smart IoT Environments", Computational Intelligence and Neuroscience, Accepted, Oct. 2022.
- [J7] H. Attar, H. Issa, J. Ababneh, M. Abbasi, "5G System Overview for Ongoing Smart Applications: Structure, Requirements", and Specifications, Computational Intelligence and Neuroscience, Accepted, Oct. 2022.
- [J8] M. Abbasi, Sk. Vakilian, Sb. Vakilian, M. R. Khosravi, H. Abdoli, "Layered methods for updating AIoT-compatible TCAMS in B5G-enabled WSNs", EURASIP Journal on Wireless Communications and Networking, Accepted, DOI: https://doi.org/10.1186/s13638-022-02134-2, June 2022.
- [J9] M. Abbasi, Sh. Maleki, Gwanggil Jeon, M.R. Khosravi, H. Abdoli, "An Intelligent Method for Reducing the Overhead of Analyzing Big Data Flows in OpenFlow Switch", IET Communications, Accepted, DOI: 10.1049/cmu2.12328, Jan. 2022.

- [J10] M. Abbasi, Motahareh Afshari Haghdooost, "Improvement and parallelization of Snort network intrusion detection mechanism using graphics processing unit", *JSDP*, vol. 18, No.1, pp. 150-135, 2021.
- [J11] N. Mousavi, F. P. Chen, M. Abbasi, M. R. Khosravi, M. Rafiee., "Efficient Pipelined Flow Classification for Intelligent Data Processing in IoT", *Digital Communications and Networks*, Accepted, Jan. 2022.
- [J12] Nazari, F. Tavassolian, M. Abbasi, R. Mohammadi, P. Yaryab, "An intelligent SDN-based clustering approach for optimizing IoT power consumption in Smart Homes," *Wireless Communications and Mobile Computing*, Accepted, DOI: <http://dx.doi.org/10.1155/2022/8783380>, March. 2022.
- [J13] M. Abbasi, A. F. Najafabadi, S. B. Eghlali, "High-Performance Pseudo anonymization of Virtual Power Plant Data on a CPU Cluster," *Cluster Computing*, Accepted, DOI: 10.1007/s10586-021-03526-7, Jan. 2022.
- [J14] M. Abbasi, M. R. Khosravi, A. Ramezani, "Intelligent Resource Management at the Network Edge using CDN," *Enterprise Information Systems*, Accepted, DOI: 10.1080/17517575.2022.2037159, Jan. 2022.
- [J15] M. Abbasi, N. Rezaei, M. R. Khosravi, "Efficient Resource-Aware Control on SIP Servers in 802.11n Wireless Edge Networks," *World Wide Web journal*, DOI: <https://10.1007/s11280-021-00908-0>, 2021.
- [J16] M. Abbasi, M. Yaghoobikia, M. Rafiee, M. R. Khosravi, "Optimal Distribution of Workloads in Cloud-Fog Architecture in Intelligent Vehicular Networks using Genetic Algorithms," *IEEE Transactions on Intelligent Transport Systems*, DOI: <https://doi.org/10.1109/TITS.2021.3071328>, 2021.
- [J17] M. Abbasi, E. Mohammadi-Pasand, M. R. Khosravi, "Intelligent Workload Allocation in IoT-Fog-Cloud Architecture Towards Mobile Edge Computing," *Computer Communications*, vol. 169, No. 1, pp. 71-80, 2020.
- [J18] P. G. Shynu, R. K. Nadesh, V. G. Menon, P. Venu, M. Abbasi, M. R. Khosravi, "A secure data deduplication system using convergent and MECC algorithms for integrated cloud and edge computing networks," *Cloud Computing*, DOI: <https://doi.org/10.1186/s13677-020-00214-6>, 2020.
- [J19] M. Abbasi, A. Najafi, M. Rafiee, M. R. Khosravi, V. G. Menon, "Efficient Flow Processing in 5G-Envisioned SDN-Based Internet of Vehicles using GPUs," *IEEE Transaction on Intelligent Transport Systems*, DOI: <https://doi.org/10.1109/TITS.2020.3038250>, 2020.
- [J20] M. Abbasi, H. Rezaei, V. G. Menon, L. Qi, M. R. Khosravi, "Enhancing the Performance of Flow Classification in SDN-based Intelligent Vehicular Networks," *IEEE Transaction on Intelligent Transport Systems*, DOI: <https://doi.org/10.1109/TITS.2020.3014044>, 2020.
- [J21] M. Abbasi, A. Shokrollahi, M. R. Khosravi, V. G. Menon, "High-Performance Flow Classification Using Hybrid Clusters in Software Defined Mobile Edge Computing," *Computer Communications*, vol. 160, pp.643-60, 2020.
- [J22] M. Abbasi, M. Rafiee, "Efficient parallelization of the packet classification algorithms on multi-core CPUs using multi-threading APIs," *IET Computers and Digital Techniques*, vol. 14, No. 6, pp. 313-321, 2020.
- [J23] X. Xu, Q. Huang, X. Yin, M. Abbasi, M. R. Khosravi, L. Qi, "Intelligent Offloading for Collaborative Smart City Services in Edge Computing," *IEEE Internet of Things*, vol. 7, No. 9, pp. 7919-7927, 2020.
- [J24] M. Abbasi, M. Yaghoobikia, M. Rafiee, A. Jolfaei, M. R. Khosravi, "Energy-efficient Workload Allocation in Fog-Cloud based Services of Intelligent Transportation Systems Using a Learning Classifier System," *IET Intelligent Transport Systems*, DOI: <https://doi.org/10.1049/iet-its.2019.0783>, 2020.
- [J25] M. Karimi, M. Nassiri, R. Mohammadi, M. Abbasi, "An efficient and energy-aware routing protocol for under water wireless sensor networks," *International Journal of Mobile Computing and Multimedia Communications*, vol.18, No. 2, pp. 145-157, 2020.
- [J26] M. Abbasi, N. Mousavi, M. Rafiee, M. R. Khosravi, V. G. Menon, "A CRC-based Classifier Micro-engine for Efficient Flow processing in SDN-Based Internet of Things," *Mobile Information Systems*, DOI: <https://doi.org/10.1155/2020/7641073>, 2020.
- [J27] M. Abbasi, A. Shokrollahi, "Enhancing the Performance of Decision Tree-based Packet Classification Algorithms Using CPU Cluster," *Cluster Computing*, vol. 23, pp.32013-3219, 2020.
- [J28] M. Abbasi, M. Yaghoobikia, M. Rafiee, A. Jolfaei, M. R. Khosravi, "Efficient resource management and workload allocation in fog-cloud computing paradigm in IoT using learning classifier systems," *Computer Communications*, vol. 153, No. 1, pp. 217-228, 2020.
- [J29] M. Abbasi, M. Rafiee, M. R. Khosravi, V. G. Menon, J.M. Koshyar, "An efficient parallel genetic algorithm solution for vehicle routing problem in cloud implementation of the intelligent transportation systems," *Journal of Cloud Computing*, DOI: <https://doi.org/10.1186/s13677-020-0157-4>, 2020.
- [J30] M. Abbasi, Ehsan Mohammadi-Pasand, Mohammad R. Khosravi, "Workload Allocation in IoT-Fog-Cloud Architecture Using a Multi-Objective Genetic Algorithm," *Journal of Grid Computing*, vol. 18, pp.43-56, 2020.
- [J31] M. Abbasi, M. Rafiee, M. R. Khosravi, "Investigating the efficiency of multi-threading application programming interfaces for parallel packet classification in wireless sensor networks," *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 28, pp. 1699-1715, 2020.
- [J32] M. Abbasi, M.R. Khosravi, "A Robust and Accurate Particle Filter-Based Pupil Detection Method for Big Datasets of Eye Video," *Journal of Grid Computing*, vol. 18, pp. 305-325, 2020.
- [J33] M. Abbasi, S. Vakilian, A. Fanian, M.R. Khosravi, "Ingredients to enhance the performance of two-stage TCAM-based packet classifiers in internet of things: greedy layering, bit auctioning and range encoding," *Journal of Wireless Communication and Networking*, DOI: <https://doi.org/10.1186/s13638-019-1617-8>, 2019.
- [J34] M. Abbasi, S. Vesaghathi Fazel, M. Rafiee, "MBitCuts: optimal bit-level cutting in geometric space packet classification," *journal of Supercomputing*, vol. 76, pp. 3105-3128, 2019.

- [J35] M. Rafiee, M. Abbasi, "Pruned Kd-tree: a memory-efficient algorithm for multi-field packet classification," SN Applied Sciences, DOI: <https://doi.org/10.1007/s42452-019-1592-z>, 2019.
- [J36] N. Khezrian, M. Abbasi, "Comparison of the performance of skip lists and splay trees in classification of internet packets," PeerJ Computer Science, DOI: <https://doi.org/10.7717/peerj-cs.204>, 2019.
- [J37] M. Abbasi, "Improving identification performance in iris recognition systems through combined feature extraction based on binary genetics," SN Journal of Applied Science, DOI: <https://doi.org/10.1007/s42452-019-0777>, 2019.
- [J38] M. Abbasi, Z. Tahoori, M. Rafiee, "Enhancing the performance of the Aggregated Bit Vector algorithm in network packet classification using GPU," PeerJ Computer Science, DOI: <https://10.7717/peerj-cs.185>, 2019.
- [J39] M. Abbasi, M. Rafiee, "A calibrated asymptotic framework for analyzing packet classification algorithms on GPUs," journal of Supercomputing, vol. 75, pp. 6574–6611, 2019.
- [J40] M. Abbasi, "Color Image Steganography using Dual Wavelet Transforms," International Journal of Computer Applications, vol.181, No. 47, pp. 32-38, 2019.
- [J41] M. Abbasi, "Rapid Detection of Multi-size Circular Shapes Using Gradient Information and Signature Curve," International Journal of Computer Applications, vol.182, No.44, pp35-39, 2019.
- [J42] M. Moradi, M. Abbasi, "A Performance Survey of Meta-Heuristic and Brute-Force Search Algorithms to Cryptanalysis, the SDES Encryption Algorithm," Biannual Journal Monadi for Cyberspace Security (AFTA), vol. 2, No. 2, pp. 72-63, 2019.
- [J43] M. Rafiee, M. Abbasi, M. Nassiri, "An efficient method for parallel implementation of H-trie packet classification algorithm on GPU," Tabriz Journal of Electrical Engineering, vol. 46, No. 3, pp. 181-196, 2016.
- [J44] Sh. Vakilian, M. Abbasi, A. Fanian, "Increasing the Efficiency of TCAM-Based Packet Classifiers Using Dynamic Cut Technique in Geometric Space," Advance Defense Sci& Tech, vol. 6, pp. 66-71, 2016.
- [J45] M. Abbasi, "Accurate D-bar Reconstructions of Conductivity Images Based on a Method of Moment with Sinc Basis," JMSS, vol. No.4, pp. 43-52, 2014.
- [J46] M. Moradi, H. Khotanlou, M. Abbasi, "Breaking Simplified-Data encryption standard using optimized SPSO," Advance Defense Sci& Tech, vol. 5, pp. 203-210, 2013.
- [J47] M. Abbasi, A. R. Naghsh-Nilchi, "Precise two-dimensional D-bar reconstructions of human chest and phantom tank via sinc-convolution algorithm," Biomedical engineering online, Vol. 11, No. 34, pp.11-34, 2012.
- [J48] M. Abbasi, A. R. Naghsh-Nilchi, "Iterative Sinc-convolution method for solving planar D-bar equation with application to EIT," Numerical Methods in Biomedical Engineering, vol. 28, No. 38, pp. 838-860, 2012.

## Conference Publications

- [c1] Omid Jamshidi, Mahdi Abbasi, A. Ramezani, M. R. Khosravi, "Distributed fault-tolerant constitutional neural networks on the edge and fog", The 7th International Conference on Internet of Things and Its Applications ( IoT2023), Isfahan, Oct. 26 , 2023.
- [c2] M. R. Pour-Hosseini, M. Abbasi, E. Mohammadaei-pasand, "Workload allocation at the network edge using light machine learning models considering resource constraints", The 7th International Conference on Internet of Things and Its Applications ( IoT2023), Isfahan, Oct. 26 , 2023.
- [c3] F. Tavassoli, M. Abbasi, R. Ramezani, M. R. Khosravi, A. Taherkordi, "An exact few-shot learning algorithm with sparse data in a federated environment on edge devices", The 7th International Conference on Internet of Things and Its Applications ( IoT2023), Isfahan, Oct. 26 , 2023.
- [c4] Mahdi Abbasi, Mehri Zareie, Ayman Amer, Mohammad R Khosravi, "Accurate Reconstruction of Electrical Impedance Tomography Images Using Genetic Algorithm", 2022 International Engineering Conference on Electrical, Energy, and Artificial Intelligence (EICEEI), Jordan, Nov. 22, 2022.
- [c5] M. Abbasi, L. Qi, M. R. Khosravi, "Accurate Multi-size Circle Detection Using Signature Curves in Hough Transform", IC3SIS'22: International Conference on Computing, Communication, Security & Intelligent Systems, Accepted, 2022.
- [c6] S. Familsamavati, P. Yari, S. Salehian, M. Abbasi, MR Khosravi, "The Role of Big Data and Smart Technologies in Autonomous Vehicles", ICFNDS 2021: The 5th International Conference on Future Networks & Distributed Systems, pp.641-646, December 2021.
- [c7] M. Abbasi, A. Asadi, S. BenElghali, M. Zerrougui, "Short-Term Forecasting of Uncertain Parameters for Virtual Power Plants", 2021 IEEE 26th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD), Porto, Portugal, Oct. 25-27, 2021.
- [c8] M. Eslami, M. Sakhaei, M. Abbasi, "Investigating the issue of deploying IoT services for computer-based healthcare applications", 5th International Conference on Internet of Things and Its Application, Isfahan, Iran, May 19-20, 2021.
- [c9] M. Rost, F. Sepahvand, M. Abbasi, "Improve the performance of bit vector algorithms for categorizing IP packets", Fifth National Conference on Computer Engineering and Blockchain Iran (CITCOMP05), Tehran, Iran, June 14, 2020.
- [c10] M. Yaghoobikia, M. Abbasi, M. Rafiee, "Providing an efficient mechanism for distributing computational loads in foggy processing using renewable energy," 25th Conference of Computer Society of Iran (CSICC 2020), Tehran, Iran, March 1-2, 2020.
- [c11] M. Yaghoobikia, M. Abbasi, M. Rafiee, S. N. Mousavi, "Providing an efficient mechanism for distributing computational loads in foggy processing using renewable energy," 3rd International Conference on Soft Computing (CSC2019), Guilan, Iran, Nov. 20-22, 2019.
- [c12] E. Mohammadi-Pasand, M. Abbasi, S. N. Mousavi, "Presenting an efficient mechanism for load distribution in cloud-fog architecture using NSGA2 algorithm," 3rd International Conference on Soft Computing (CSC2019), Guilan, Iran, Nov. 20-22, 2019.
- [c13] S. N. Mousavi, M. Abbasi, M. Rafiee, "Design and implementation of SRAM-based Internet package packing engine on FPGA," 3rd International Conference on Soft Computing (CSC2019), Guilan, Iran, Nov. 20-22, 2019

- [c14] S. N. Mousavi, M. Abbasi, M. Rafiee, "Presenting an architecture with a low power core on FPGA, for classifying Internet packets," 3rd International Conference on Soft Computing (CSC2019), Guilan, Iran, Nov. 20-22, 2019.
- [c15] S. Vesaghati-Asl, M. Abbasi, "A novel method for enhancing Bit cut algorithm regarding memory constraints," 24th Conference of Computer Society of Iran CSICC2019, Tehran, Iran, March 13-14, 2019.
- [c16] H. Rezaei, M. Abbasi, "enhancing the performance of decision tree-based packet classification algorithm using leaf pushing technique," Second National Conference on Electronics and Computer, Isfahan, Feb. 8-9, 2019.
- [c17] N. Rezaei, M. Abbasi, M. Nassiri, "Implementing call admission control in SIP server on real 802.11n testbed," First International Conference on Soft Computing (CSC2017), Guilan, Iran, Nov. 22-23, 2017.
- [c18] M. Afshari, M. Abbasi, "Parallel implementation of a pre-processing step in intrusion detection system using GPUs," First International Conference on Soft Computing (CSC2017), Guilan, Iran, Nov. 22-23, 2017.
- [c19] F. Sajjadian, M. Abbasi, "Parallel implementation of cross-product packet classification algorithm on GPU and GPU- cluster," First International Conference on Soft Computing (CSC2017), Guilan, Iran, Nov. 22-23, 2017.
- [c20] Sho. Vakilian, M. Abbasi, "Updating TCAM fin IPV4 routing-tables," 25th Iranian Conference on Electrical Engineering (ICEE2017), Tehran, Iran, May 2-4, 2017.
- [c21] Sh. Maleki, M. Abbasi, M. Nassiri, "A novel method for rule replacement in flow tables of OpenFlow," 3rd National Conference on Distributed Computing and Big Data Processing, Azerbaijan, Iran, May 16-17, 2017.
- [c22] A. Fazel, M. Abbasi, A. Shokrollahi, "Enhancing the performance of tuple space packet classification algorithms by using CPU clusters," 3rd National Conference on Distributed Computing and Big Data Processing, Azerbaijan, Iran, May 16-17, 2017.
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## Fund Seeking

- **Principal Investigator**, Iranian Ministry of Science, Research, and Technology (IMSRT), Research Grant, **50K\$**, Terminated, 2022.
- **Principal Investigator**, Iranian Grid Management Company (IGMC), Improving small signal stability using PMU data at the edge, **235K\$**, Proposal Submitted, 2023.
- **Team Member**, Iranian Telecom Research Center (ITRC), ICT Wordnet Project, **140K\$**, Terminated, 2015.
- **Team Member**, European Union, Smart Platform of efficient Distributed nExus Resources (SPIDER), **9ME**, Proposal Rejected, 2021.
- **Team Member**, European Union, Virtual Power Plant for Interoperable and Smart ISLANDS, **7.2ME**, Under Deployment, 2021.

- **Team Member**, Qufu Normal University (China), (PAPD Project) Intelligent Offloading for Collaborative Smart City Services in Edge Computing **215 K\$**, Terminated, 2020.

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