# Ahmad Khonsari, Ph.D.

School of Electrical and Computer Engineering

University of Tehran

Tel (Direct): +98 (21)82084333

email: a\_khonsari@ut.ac.ir

Website:

**EDUCATION**

**Ph.D In computer**University of Glasgow 2000-2003  
**M.Sc In Computer Architecture**Iran University of Science and Technology 1993-1996  
**B.Sc In Electrical Engineering - Hardware**Shahid Beheshti 1987-1992

**PUBLICATIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1269** | **18** | **79** | **39** | **2** |
| Citations | h-Index | Article | Conference | Book |

***Articles***

**1.** EneX: An Energy-Aware Execution Scheduler for Serverless Computing. Rastegar Seyed Hamed, SHAFIEI HOSSEIN, Khonsari Ahmad (2024)., IEEE Transactions on Industrial Informatics, 20(2), 2342-2353.  
  
**2.** A Generalized Residue Number System Design Approach for Ultralow-Power Arithmetic Circuits Based on Deterministic Bit-Streams. Givaki Kamyar, Khonsari Ahmad, Gholamrezaei MohammadHosein, Gorgin Saeid, Najafi M. Hassan (2023)., IEEE TRANSACTIONS ON COMPUTER-AIDED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS, 42(11), 3787-3800.  
  
**3.** Layer-Aware Containerized Service Orchestration in Edge Networks. Dolati Mahdi, Rastegar Seyed Hamed, Khonsari Ahmad, Ghaderi Majid (2023)., IEEE Transactions on Network and Service Management, 20(2), 1830-1846.  
  
**4.** Privacy-preserving edge caching: A probabilistic approach. Hassanpour Seyedeh Bahereh, Khonsari Ahmad, Moradian Masoumeh, Shariatpanahi Seyed Pooya (2023)., Computer Networks, 226(226), 109654.  
  
**5.** On the Age of Status Updates in Unreliable Multi-Source M/G/1 Queueing Systems. Senthil Kumar Muthukrishnan, Dadlani Aresh, Moradian Masoumeh, Khonsari Ahmad, Tsiftsis Theodoros A. (2023)., IEEE COMMUNICATIONS LETTERS, 27(2), 751-755.  
  
**6.** Stereo: Assignment and Scheduling in MPSoC Under Process Variation by Combining Stochastic and Decomposition Approaches. Khodabandeloo Behnam, Khonsari Ahmad, Behnam Payman, Majidi Alireza, Hajiesmaili Mohammad Hassan (2022)., IEEE TRANSACTIONS ON COMPUTERS, 71(11), 2940-2954.  
  
**7.** Content Caching in Shared Medium Networks with Non-Uniform and User-Dependent Demands. Ghaffari Sheshjavani Abdollah, Khonsari Ahmad, Shariatpanahi Seyed Pooya, مرادیان معصومه (2022)., The CSI Journal on Computing Science and Information Technology, 20(1), 41- 53.  
  
**8.** Monitoring OpenFlow Virtual Networks via Coordinated Switch-Based Traffic Mirroring. Sadrhaghighi Sogand, Dolati Mahdi, Ghaderi Majid, Khonsari Ahmad (2022)., IEEE Transactions on Network and Service Management, 19(3), 2219-2237.  
  
**9.** Minimizing Update Makespan in SDNs Without TCAM Overhead. Dolati Mahdi, Khonsari Ahmad, Ghaderi Majid (2022)., IEEE Transactions on Network and Service Management, 19(2), 1598-1613.  
  
**10.** Serverless Computing: A Survey of Opportunities, Challenges, and Applications. SHAFIEI HOSSEIN, Khonsari Ahmad, Mousavi Payam (2022)., ACM COMPUTING SURVEYS, 54(11s), 1-32.  
  
**11.** Co-Evolution of Viral Processes and Structural Stability in Signed Social Networks. Kalimzhanov Temirlan, Haji Ali Khamseh'i Amir, Dadlani Aresh, Senthil Kumar Muthukrishnan, Khonsari Ahmad (2022)., IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, 35(8), 1-6.  
  
**12.** High-Performance Deterministic Stochastic Computing Using Residue Number System. Givaki Kamyar, Hojabrossadati Seyedreza, Gholamrezaei M.H, Khonsari Ahmad, Gorgin Saeid, Rahmati Dara, Najafi Mohammad Hassan (2021)., IEEE DESIGN & TEST OF COMPUTERS, 38(6), 60-68.  
  
**13.** BCHealth: A Novel Blockchain-based Privacy-Preserving Architecture for IoT Healthcare Applications. Mohammad Hossein Koosha, Esmaeili Mohammad esmaeil, Dargahi Tooska, Khonsari Ahmad, Conti Mauro (2021)., COMPUTER COMMUNICATIONS, 180(180), 31-47.  
  
**14.** Content caching for shared medium networks under heterogeneous users’ behaviors. Ghaffari Sheshjavani Abdollah, Khonsari Ahmad, Shariatpanahi Seyed Pooya, Moradian Masoumeh (2021)., Computer Networks, 199(108454), 108454.  
  
**15.** TAMA: Turn-aware Mapping and Architecture–A Power-efficient Network-on-Chip Approach. Aligholipour Rashid, Baharloo Mohammad, Farzaneh Behnam, Abdollahi MEISAM, Khonsari Ahmad (2021)., ACM Transactions on Embedded Computing Systems, 20(5), 1-24.  
  
**16.** Context-Aware Privacy Preservation in Network Caching: An Information Theoretic Approach. Hassanpour Seyedeh Bahereh, Diyanat Abolfazl, Khonsari Ahmad, Shariatpanahi Seyed Pooya, Dadlani Aresh (2021)., IEEE COMMUNICATIONS LETTERS, 25(1), 54-58.  
  
**17.** Stability Region and Delay Analysis of a SWIPT-Based Two-Way Relay Network With Opportunistic Network Coding. Moradian Masoumeh, Ashtiani farid, Khonsari Ahmad (2020)., IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, 69(12), 15682-15693.  
  
**18.** Accelerating Virtual Network Embedding with Graph Neural Networks. Habibi Farzad, Dolati Mahdi, Khonsari Ahmad, Ghaderi Majid (2020)., International Conference on Network and Service Management (CNSM), 16(1), 1-9.  
  
**19.** Traffic-aware performance optimization in Real-time wireless network on chip. Baharloo Mohammad, Khonsari Ahmad, Dolati Mahdi, Shiri Pouya, Ebrahimi Masoumeh, Rahmati Dara (2020)., Nano Communication Networks, 26(100321), 100321.  
  
**20.** Preserving location anonymity of participants in the IoT network with the ability to tolerate latency for crowdsensing applications. Sazdar Amir Mahdi, Ghorashi Seyed Ali, Khonsari Ahmad (2020)., Computing Science Journal, 17(2), 2-20.  
  
**21.** A Low-complexity trajectory privacy preservation approach for indoor fingerprinting positioning systems. Sazdar Amir Mahdi, Ghorashi Seyed Ali, Moghtadaiee Vahideh, Khonsari Ahmad, Windridge David (2020)., JOURNAL OF INFORMATION SECURITY AND APPLICATIONS, 53(102), 102515.  
  
**22.** Privacy preserving in indoor fingerprint localization and radio map expansion. Sazdar Amir Mahdi, Alikhani Nasim, Ghorashi Seyed Ali, Khonsari Ahmad (2020)., Peer-to-Peer Networking and Applications, 14(1), 121-134.  
  
**23.** A hybrid algorithm for task scheduling on heterogeneous multiprocessor embedded systems. Taheri Golnaz, Khonsari Ahmad, Entezari Maleki Reza, Sousa Leonel (2020)., APPLIED SOFT COMPUTING, 91(106), 106202.  
  
**24.** ChangeSUB: A power efficient multiple network-on-chip architecture. Baharloo Mohammad, Aligholipour Rashid, Abdollahi Meisam, Khonsari Ahmad (2020)., COMPUTERS & ELECTRICAL ENGINEERING, 83(106), 106578.  
  
**25.** Temperature-aware core management in MPSoCs: modelling and evaluation using MRMs. Taheri Golnaz, Khonsari Ahmad, Entezari Maleki Reza, Sousa Leonel (2020)., IET Computers and Digital Techniques, 14(1), 17-26.  
  
**26.** Multi-Armed Bandit Learning for Cache Content Placement in Vehicular Social Networks. Akhavan Bitaghsir Saeid, Dadlani Aresh, Borhani Mohammad, Khonsari Ahmad (2019)., IEEE COMMUNICATIONS LETTERS, 23(12), 2321-2324.  
  
**27.** General spin-up time distribution for energy-aware IaaS cloud service models. Chitsaz Behzad, Khonsari Ahmad (2019)., Cluster Computing-The Journal of Networks Software Tools and Applications, 23(93).  
  
**28.** Bayesian inference of private social network links using prior information and propagated data. Seyedhassani Amirreza, Sayadhaghighi Mohammad, Khonsari Ahmad (2018)., JOURNAL OF PARALLEL AND DISTRIBUTED COMPUTING, 125(1).  
  
**29.** A low-power wireless-assisted multiple network-on-chip. Baharloo Mohammad, Khonsari Ahmad (2018)., MICROPROCESSORS AND MICROSYSTEMS, 63(63), 104-115.  
  
**30.** Multiperiod Network Rate Allocation With End-to-End Delay Constraints. Hajiesmaili Mohammad, Talebi Mohammad Sadegh, Khonsari Ahmad (2018)., IEEE Transactions on Control of Network Systems, 5(3), 1087-1097.  
  
**31.** Modeling and improving the throughput of vehicular networks using cache enabled RSUs. Akhavan Saeed, Khonsari Ahmad (2018)., TELECOMMUNICATION SYSTEMS, 1(1), 1-22.  
  
**32.** Temperature-aware dynamic voltage and frequency scaling enabled MPSoC modeling using Stochastic Activity Networks. Taheri Golnaz, Khonsari Ahmad, Entezari Maleki Reza, Baharloo Mohammad, Sousa Leonel (2018)., MICROPROCESSORS AND MICROSYSTEMS, 60(1), 15-23.  
  
**33.** Cooperative caching for content dissemination in vehicular networks. Akhavan Saeed, Khonsari Ahmad (2018)., INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS, 31(8), e3534.  
  
**34.** Cost-Effective Low-Delay Design for Multiparty Cloud Video Conferencing. Hajiesmaili Mohammad Hassan, To Mak Lok, Zhi Wang Zhi, Wuwu Chuan, Chen Minghua, Khonsari Ahmad (2017)., IEEE Transactions on Multimedia, 19(12), 2760-2774.  
  
**35.** Coded Multicasting for Content Dissemination in a Cellular Vehicular Network. Akhavan Saeed, Khonsari Ahmad (2017)., IEEE COMMUNICATIONS LETTERS, 21(12), 2694-2697.  
  
**36.** Preservation of temporal privacy in body sensor networks. Dianat Abolfazl, Khonsari Ahmad, Shafiei Hossein (2017)., JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, 96(1), 62-71.  
  
**37.** Maximum-Quality Tree Construction for Deadline-Constrained Aggregation in WSNs. Alinia Bahram, Hajiesmaili Mohammad Hassan, Khonsari Ahmad, Crespi Noel (2017)., IEEE SENSORS JOURNAL, 17(12), 3930-3943.  
  
**38.** A fast temperature-aware fixed-outline floorplanning framework using convex optimization. Khoda Bandehloo Behnam, Khonsari Ahmad, Jasemi Masoomeh, Taheri Golnaz (2017)., INTEGRATION-THE VLSI JOURNAL, 58(1), 101-110.  
  
**39.** Customizing Clos Network-on-Chip for Neural Networks. Hojabrossadati Seyedreza, Modarressi Mehdi, Daneshtalab Masoud, Yasoubi Ali, Khonsari Ahmad (2017)., IEEE TRANSACTIONS ON COMPUTERS, pp(99), 1-1.  
  
**40.** Energy efﬁcient aggregate monitoring for sensor ﬁelds with time-varying statistics. Biazar Esmaeil, Khonsari Ahmad, Heidari Samaneh, Amani Ronak (2016)., International Journal of Sensor Networks, 22(1), 37-46.  
  
**41.** Increasing Throughput in Adhoc Networks Using Queuing Model with Jockeying and Considering Initial Probability of Allocations. کشتکار محمد امین, Khonsari Ahmad, دیانت ابوالفضل (2016)., The CSI Journal on Computing Science and Information Technology, 14(1), 23-31.  
  
**42.** A flexible and high-performance data center network topology. Azizi Sadoon, Hashemi Naser, Khonsari Ahmad (2016)., JOURNAL OF SUPERCOMPUTING, 73(4), 1484-1503.  
  
**43.** A Dummy-Based Approach for Preserving Source Rate Privacy. Dianat Abolfazl, Khonsari Ahmad, Shariatpanahi Seyed Pooya (2016)., IEEE Transactions on Information Forensics and Security, 11(6), 1321-1332.  
  
**44.** HHS: an efficient network topology for large-scale data centers. Azizi Sadoon, Hashemi Naser, Khonsari Ahmad (2016)., JOURNAL OF SUPERCOMPUTING, 72(3), 874-899.  
  
**45.** On the Perfect Privacy: a Statistical Analysis of Network Traffic Approach. Rezaeitabar Amir Hossein, Dianat Abolfazl, Khonsari Ahmad (2016)., IEEE COMMUNICATIONS LETTERS, 20(6), 1-1.  
  
**46.** An effective countermeasure against traffic analysis attacks in wide area measurement systems. Shafiei Hossein, Khonsari Ahmad, Ould-khaoua Mohamed (2015)., INFORMATION SYSTEMS, 53(1), 182-189.  
  
**47.** Temporal-aware rate allocation in mission-oriented WSNs with sum-rate demand guarantee. Javadi Soheil, Haji Esmaiili M.h, Khonsari Ahmad, Moshiri Behzad (2015)., COMPUTER COMMUNICATIONS, ---(---).  
  
**48.** Critical path-aware voltage island partitioning and floorplanning for hard real-time embedded systems. Mahabadi Amin, Khonsari Ahmad, Khodabandeloo Behnam, Noori Hamid, Majidi Alireza (2015)., INTEGRATION-THE VLSI JOURNAL, 48(1), 21-35.  
  
**49.** Cooling aware job migration for reducing cost in cloud environment. Naserian Elaheh, Ghoreyshi Seyed Mohammad, Shafiei Hossein, Mousavi Payam, Khonsari Ahmad (2014)., JOURNAL OF SUPERCOMPUTING, 71(3), 1018-1037.  
  
**50.** Scenario-based quasi-static task mapping and scheduling for temperature-efficient MPSoC design under process variation. Khodabandeloo Behnam, Khonsari Ahmad, Gholamian Farzad, Hajiesmaili Mohammad, Mahabadi Amin, Noori Hamid (2014)., MICROPROCESSORS AND MICROSYSTEMS, 38(5), 399-414.  
  
**51.** Detection and mitigation of sinkhole attacks in wireless sensor networks. Shafiei Hossein, Khonsari Ahmad, Derakhshi Hazhir, Mousavi Payam (2014)., JOURNAL OF COMPUTER AND SYSTEM SCIENCES, 80(3), 644-653.  
  
**52.** HARP: Harnessing Inactive Threads in Many-Core Processors. Lashgar Ahmad, Khonsari Ahmad, Baniasadi Amirali (2014)., ACM Transactions on Embedded Computing Systems, 13(3s), 1-25.  
  
**53.** Joint multipath rate control and scheduling for SVC streams in wireless mesh networks. Hajiesmaili Mohammad, Sadegh Talebi Mohammad, Khonsari Ahmad (2014)., International Journal of Ad Hoc and Ubiquitous Computing, 15(4), 239-251.  
  
**54.** Maximizing Quality of Aggregation in Delay-Constrained Wireless Sensor Networks. Alinia Bahram, Hamed Yousefi, Mohammad Sadegh Talebi, Khonsari Ahmad (2013)., IEEE COMMUNICATIONS LETTERS, 11(17), 2084-2087.  
  
**55.** DT-MAC: An Efficient and Scalable Medium Access Control Protocol for Wireless Networks. Teymoori Peyman, Yazdani Naser, Khonsari Ahmad (2013)., IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, 12(3), 1268-1278.  
  
**56.** Content-aware rate allocation for efficient video streaming via dynamic network utility maximization. Mohammad Hasan Haji Esmaeili, Khonsari Ahmad, Ali Sehati, Mohammad Sadegh Talebi (2012)., JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, 35(6), 2016-2027.  
  
**57.** Reliable energy - aware application mapping and voltage – frequency island partitioning for GALS - based NoC. S M Zahedi, A Mahabadi, Khonsari Ahmad (2012)., JOURNAL OF COMPUTER AND SYSTEM SCIENCES, -(---), -.  
  
**58.** Clone-Based Mobile Agent Itinerary Planning Using Separate Trees For Data Fusion In WSNS. Javadi Soheil, Hajiesmaili Mohammad, Moshiri Behzad, Khonsari Ahmad (2012)., International Journal of Wireless Information Networks, 4(4), 227-242.  
  
**59.** Analytical modeling and comparison of fault - tolerant message flow control mechanisms in torus - connected networks. Farshad Safaei, Khonsari Ahmad (2012)., JOURNAL OF SUPERCOMPUTING, 59(2), 941-974.  
  
**60.** A key-distribution mechanism for wireless sensor networks using Zig-Zag product. H Shafiei, Khonsari Ahmad, M S Talebi, M Ould Khaoua (2012)., International Journal of Ad Hoc and Ubiquitous Computing, 11(1), 1.  
  
**61.** An analytical model of delay in multi - hop wireless ad hoc networks. Yoohana Ghadimi, Khonsari Ahmad, Abolfazl Diyanat, Mojtaba Farmani, Yazdani Naser (2011)., WIRELESS NETWORKS, 17(7), 1679-1697.  
  
**62.** Cost-aware monitoring of network-wide aggregates in wireless sensor networks. Mohammad Sadegh Talebi, Khonsari Ahmad, Amin Mohtasham, Ali Abbasi (2011)., Computer Networks, 55(6), 1276-1290.  
  
**63.** Utility-proportional bandwidth sharing for multimedia transmission supporting scalable video coding. Mohammad Sadegh Talebia, Khonsari Ahmad, Mohammad H Hajiesmailia (2010)., COMPUTER COMMUNICATIONS, 33(13), 1543-1556.  
  
**64.** On the Topological Properties of Grid-Based Interconnection Networks: Surface Area and Volume of Radial Spheres. H Sarbazi Azad, Khonsari Ahmad, M Ouldkhoua (2010)., COMPUTER JOURNAL, 54(5), 726-737.  
  
**65.** On modeling optical burst switching networks with fiber delay lines A novel approach. A Rajabi, Khonsari Ahmad, A Dadlani (2010)., COMPUTER COMMUNICATIONS, 33(2), 240-249.  
  
**66.** A new performance measure for characterizing fault ringsin interconnection networks. F Safaeia, Khonsari Ahmad, Mm Gilaka (2010)., INFORMATION SCIENCES, 180(5), 664-678.  
  
**67.** Performance Analysis of Optical Packet - Switched MeshesMetrics and Modeling. A Kianrad, Khonsari Ahmad, N Yazdani, A Dadlani (2010)., The CSI Journal on Computer Science and Engineeringn, 5(2), 25-32.  
  
**68.** Adaptive wormhole routing in tori with faults : A mathematical approach. F Safaei, Khonsari Ahmad, M Fathy, M Ould Khaoua (2009)., SIMULATION MODELLING PRACTICE AND THEORY, 17(9), 1468-1484.  
  
**69.** Rich document representation and classification An analysis. Mostafa Keikha, Khonsari Ahmad, Farhad Oroumchian (2009)., KNOWLEDGE-BASED SYSTEMS, 22(1), 67-71.  
  
**70.** A new general method to compute virtual channels occupancy probabilities in wormhole networks. N Alzeidi, M Ould Khaoua, Khonsari Ahmad (2008)., JOURNAL OF COMPUTER AND SYSTEM SCIENCES, 74(6), 1033-1042.  
  
**71.** Pipelined circuit switching Analysis for the torus with non - uniform traffic. F Safaei, Khonsari Ahmad, M Fathy (2008)., JOURNAL OF SYSTEMS ARCHITECTURE, 54(1-2), 97-100.  
  
**72.** A new modelling approach of wormhole - switched networks with finite buffers. Khonsari Ahmad, M Ouldkhaoua, N Alzeidi (2008)., INTERNATIONAL JOURNAL OF PARALLEL EMERGENT AND DISTRIBUTED SYSTEMS, 23(1), 45-57.  
  
**73.** Communication delay analysis of fault - tolerant pipelined circuit switching in torus. F Safaei, Khonsari Ahmad, M Fathy, M Ould Khaoua (2007)., JOURNAL OF COMPUTER AND SYSTEM SCIENCES, 73(8), 1131-1144
.  
  
**74.** A New Approach to Model Virtual Channels in Interconnection Networks. N Alzeid, Khonsari Ahmad, M Ould Khaou, L Mackenzi (2007)., JOURNAL OF COMPUTER AND SYSTEM SCIENCES, 73(8), 1121-1130.  
  
**75.** Performance analysis of fault - tolerant routing algorithm in wormhole - switched interconnections. F Fathy, Khonsari Ahmad, M Fathy, M Ould Khaoua (2007)., JOURNAL OF SUPERCOMPUTING, 41(3), 215-245.  
  
**76.** A PERFORMANCE MODEL OF DISHA ROUTING IN K - ARY N - CUBE NETWORKS. Khonsari Ahmad, Alireza Shahrabi, Mohamed Ould Khaoua (2007)., Parallel Processing Letters, 17(---), 213-228.  
  
**77.** Anonymous Communication in MANETs UsingPseudonymity in Chain - Based Routing. Reza Shokri, Maysam Yabandeh, Nasser Yazdani, Khonsari Ahmad (2006)., The CSI Journal on Computer Science and Engineeringn, 4(2-4), 25-31.  
  
**78.** Performance modelling of pipelined circuit switching in hypercubes with hot spot traffic. M Ould Khaoua, M Fathy, Khonsari Ahmad, F Safaei (2005)., Lecture Notes in Computer Science, 3779(---), 245-248.  
  
**79.** A Performance Model of Software - based Deadlock Recovery Routing Algorithm in Hypercube. Khonsari Ahmad, H Sarbazi Azad, Mohamed Ould Khaoua (2005)., Parallel Processing Letters, 15(1,2), 153-156.

***Books***

**1.** Introduction to Probability. Khonsari Ahmad (2020).  
  
**2.** Hardware Architectures for Deep Learning. Hojabr reza, Khonsari Ahmad, Modarressi Mehdi, Daneshtalab Masoud (2020).

***Conferences***

**1.** Content Caching in Shared Medium Networks with Non-Uniform and User-Dependent Demands. Ghaffari Sheshjavani Abdollah, Khonsari Ahmad, Shariatpanahi Seyed Pooya, Moradian Masoumeh, Dadlani Aresh (2022)., ICC 2022 - IEEE International Conference on Communications, 16-20 May, seoul, South Korea.  
  
**2.** On Skipping Redundant Computation via Smart Task Deployment for Faster Serverless. Vatandoost silab Mohammad, Hassanpour Seyedeh Bahereh, Khonsari Ahmad, Dadlani Aresh (2022)., ICC 2022 - IEEE International Conference on Communications, 16-20 May, South Korea.  
  
**3.** FlowShark: Sampling for High Flow Visibility in SDNs. Sadrhaghighi Sogand, Dolati Mahdi, Ghaderi Majid, Khonsari Ahmad (2022)., IEEE INFOCOM 2022 - IEEE Conference on Computer Communications, 2-5 May, London, England .  
  
**4.** EVBLB: Efficient Voronoi Tessellation-Based Load Balancing in Edge Computing Networks. Sohrabi Vahid, Esmaeili Mohammad Esmaeil, Dolati Mahdi, Khonsari Ahmad, Dadlani Aresh (2021)., GLOBECOM 2021 - 2021 IEEE Global Communications Conference, 7-11 December, Madrid, Spain.  
  
**5.** X-Layer: Building Composable Pipelined Dataflows for Low-Rank Convolutions. Vedula Naveen, Hojabrossadati Seyedreza, Khonsari Ahmad, Shriraman Arrivndh (2021)., 2021 30th International Conference on Parallel Architectures and Compilation Techniques (PACT), 26-29 September, Atlanta, United States.  
  
**6.** SoftTap: A Software-Defined TAP via Switch-Based Traffic Mirroring. Sadrhaghighi Sogand, Dolati Mahdi, Ghaderi Majid, Khonsari Ahmad (2021)., 2021 IEEE 7th International Conference on Network Softwarization (NetSoft), 28 June-2 July, Tokyo, Japan.  
  
**7.** SPAGHETTI: Streaming Accelerators for Highly Sparse GEMM on FPGAs. Hojabrossadati Seyedreza, Sedaghati Ali, Sharifian Amirali, Khonsari Ahmad, Shriraman Arrvindh (2021)., 2021 IEEE International Symposium on High-Performance Computer Architecture (HPCA), 27 February-3 March, seoul, South Korea.  
  
**8.** Accelerating Virtual Network Embedding with Graph Neural Networks. Habibi Farzad, Dolati Mahdi, Khonsari Ahmad, Ghaderi Majid (2020)., 2020 16th International Conference on Network and Service Management (CNSM), 2-6 November, İzmir, Turky.  
  
**9.** TaxoNN: A Light-Weight Accelerator for Deep Neural Network Training. Hojabrossadati Seyedreza, Givaki Kamyar, Pourahmadi Kossar, Nooralinejad Eslamloo Parsa, Khonsari Ahmad, Rahmati Dara, Najafi Mohammad Hassan (2020)., 2020 IEEE International Symposium on Circuits and Systems (ISCAS), 12-14 October, Seville, Spain.  
  
**10.** Coded Caching Under Non-Uniform Content Popularity Distributions with Multiple Requests. Ghaffari Sheshjavani Abdollah, Khonsari Ahmad, Shariatpanahi Seyed Pooya, Moradian Masoumeh, Dadlani Aresh (2020)., 2020 IEEE Wireless Communications and Networking Conference (WCNC), 25-28 May, seoul, South Korea.  
  
**11.** On the Resilience of Deep Learning for Reduced-voltage FPGAs. Givaki Kamyar, Salami Behzad, Hojabrossadati Seyedreza, Tayaranian S. M. Reza, Khonsari Ahmad, Rahmati Dara, Gorgin Saeid, Cristal Adrian, Unsal Osman (2020)., 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP), 11-13 March, Vasteras, SWEDEN.  
  
**12.** Hybrid Coded Caching in Cellular Networks with D2D-Enabled Mobile Users. Hassanpour Seyedeh Bahereh, Khonsari Ahmad, Shariatpanahi Seyed Pooya, Dadlani Aresh (2019)., 2019 IEEE 30th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 8-11 September, İSTANBUL, Turky.  
  
**13.** Using Residue Number Systems to Accelerate Deterministic Bit-stream Multiplication. Givaki Kamyar, Hojabrossadati Seyedreza, Najafi Mohammad Hassan, Khonsari Ahmad, Gholamrezayi Mohammad Hassan, Gorgin Saeid, Rahmati Dara (2019)., 2019 IEEE 30th International Conference on Application-specific Systems, Architectures and Processors (ASAP), 15-17 July, New York, United States Of America.  
  
**14.** Social-aware Mobile Road Side Unit for Content Distribution in Vehicular Social Networks. Akhavan Bitaghsir Saeid, Kashipazha sina, Dadlani Aresh, Khonsari Ahmad (2019)., 2019 IEEE Symposium on Computers and Communications (ISCC), 29 June-3 July, Barcelona, Spain.  
  
**15.** SkippyNN: An Embedded Stochastic-Computing Accelerator for Convolutional Neural Networks. Hojabrossadati Seyedreza, Givaki Kamyar, Tayaranian Reza, Esfahanian Parsa, Khonsari Ahmad, Rahmati Dara, Najafi M. Hassan (2019)., the 56th Annual Design Automation Conference 2019, 2-6 June, Las Vegas, USA.  
  
**16.** Blockchain-Based Privacy-Preserving Healthcare Architecture. Mohammad Hossein Koosha, Asmaeili Mohammad, Dargahi Tooska, Khonsari Ahmad (2019)., 2019 IEEE Canadian Conference of Electrical and Computer Engineering (CCECE), 5-8 May, Edmonton, Canada.  
  
**17.** DeepViNE: Virtual Network Embedding with Deep Reinforcement Learning. Dolati Mahdi, Hassanpour Seyedeh Bahereh, Ghaderi Majid, Khonsari Ahmad (2019)., IEEE INFOCOM 2019 - IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), 29 April-2 May, paris, France.  
  
**18.** Consistent SDN Rule Update with Reduced Number of Scheduling Rounds. Dolati Mahdi, Khonsari Ahmad, Ghaderi Majid (2018)., 14th International Conference on Network and Service Management, 5-9 November, Rome, Italy.  
  
**19.** High-Average and Guaranteed Performance for Wireless Networks-on-Chip Architectures. Baharloo Mohammad, Khonsari Ahmad, Shiri Pouya, Namdari Iman, Rahmati Dara (2018)., IEEE Computer Society Annual Symposium on VLSI, 8-11 July, Hong Kong, Hong Kong.  
  
**20.** Task Assignment and Scheduling in MPSoC under Process Variation: A Stochastic Approach. Khodabandeloo Behnam, Khonsari Ahmad, Majidi Alireza, Hajiesmaili Mohammad Hassan (2018)., The 23rd Asia and South Pacific Design Automation, ASP-DAC, 22-25 January, seoul, South Korea.  
  
**21.** Promotion e-Health Services for Rural and Less Developed Regions through Cyber Physical Systems (CPS). Taghiyareh Fattaneh, Khonsari Ahmad, Shakery Azadeh, Kargahi Mehdi, Ghassemi Esfahani Fatemeh, Mohammadi Siamak (2016)., The First National Conference on Universal Service Obligation (USO) for ICT in Rural and Less Developed Regions, 5 December, Tehran, Iran.  
  
**22.** A Novel Technique Based on Cloud Picture Archiving and Communication for Trauma Application. Keshavarzi Ashkan, Aghaizadeh Zoroofi Reza, Khonsari Ahmad (2016)., International Conference on Iran Information Technology, 22-24 September, Tehran, Iran.  
  
**23.** Mobility increases throughput of wireless device-to-device networks with coded caching. Shabani Ahmad, Shariatpanahi Seyed Pooya, Shah-mansouri Vahid, Khonsari Ahmad (2016)., IEEE International Conference on Communications (ICC), 22-27 May, Kuala Lumpur, Malaysia.  
  
**24.** Utility-optimal dynamic rate allocation under average end-to-end delay requirements. Hajiesmaili Mohammad, Sadegh Talebi Mohammad, Khonsari Ahmad (2015)., IEEE Conference on Decision and Control, 15-18 December, Osaka, Japan.  
  
**25.** Cost-Effective Low-Delay Cloud Video Conferencing. Hajiesmaili Mohammad, To Mak Lok, Wang Zhi, Wu Chuan, Chen Minghua, Khonsari Ahmad (2015)., IEEE 35th International Conference on Distributed Computing System, 29 June-2 July, Columbus, United States.  
  
**26.** On the Construction of Maximum-Quality Aggregation Trees in Deadline-Constrained WSNs. Alinia Bahram, Hajiesmail Mohammad Hassan, Khonsari Ahmad (2015)., IEEE Infocom'15, 26 April-1 May, Hong Kong, Hong Kong.  
  
**27.** nineteenth conference. Farhadi Navid, Khonsari Ahmad, Shafiei Hossein, Naserian Elahe (2014)., 19th national conference, 4-6 March, Tehran, Iran.  
  
**28.** Towards green GPUs: Warp size impact analysis. Lashgar Ahmad, Baniasadi Amirali, Khonsari Ahmad (2013)., Green Computing Conference (IGCC), 2013, 27-29 June, Arlington, United States Of America.  
  
**29.** Rate-Privacy in Wireless Sensor Networks. Shafiei Hossein, Khonsari Ahmad, Derakhshi Hazhir, Mousavi Payam (2013)., IEEE INFOCOM 2013, 14-19 April, Torino, Italy.  
  
**30.** Warp Size Impact in GPUs: Large or Small?. Lashgar Ahmad, Baniasadi Amirali, Khonsari Ahmad (2013)., 6th Workshop on General Purpose Processor Using Graphics Processing Units, 16 March, Houston, United States Of America.  
  
**31.** Inter-warp Instruction Temporal Locality in Deep-Multithreaded GPUs. Lashgar Ahmad, Baniasadi Amirali, Khonsari Ahmad (2013)., International Conference on Architecture of Computing Systems, 19-22 February, Prague, Czechoslovakia.  
  
**32.** Dynamic Warp Resizing: Analysis and Benefits in High-Performance SIMT. Lashgar Ahmad, Baniasadi Amirali, Khonsari Ahmad (2012)., IEEE 30th International Conference on Computer Design, 30 September-3 October, Montreal, Canada.  
  
**33.** Exploring Playback Continuity and Delay Trade off in Peer to Peer Streaming. Heidari Samaneh, Dehghani Nazanin, Talebi Mohammad Sadegh, Khonsari Ahmad (2012)., IEEE ISCC, 1-4 July, Cappadocia, Turkey.  
  
**34.** NUM-Based Rate Allocation for Streaming Traffic via Sequential Convex Programming. Sehati Ali, Talebi Mohammad Sadegh, Khonsari Ahmad (2012)., IEEE ICC, 10-15 June, Ottawa, Canada.  
  
**35.** Content-Aware Rate Control for Video Transmission with Buffer Constraints in Multipath Networks. Hajiesmaili Mohammad Hassan, Sehati Ali, Khonsari Ahmad (2012)., IEEE NTMS, 7-10 May, Istanbul, Turkey.  
  
**36.** CSI. جوادی سهیل, حاجی اسماعیلی محمد حسن, Moshiri Behzad, Khonsari Ahmad (2012)., CSI, 6-8 March, Tehran, Iran.  
  
**37.** Reuse-Attack Mitigation in Wireless Sensor Networks.. Shafiei Hossein, Khonsari Ahmad, Mirzasoleiman Baharan, Ould-Khaoua Mohamed (2011)., IEEE-ICC, 6-10 June, Kyoto, Japan.  
  
**38.** Reactive Monitoring of Aggregates in Gaussian Random Field. Mohtasham Amin, Khonsari Ahmad, Abhari Abdolreza (2010)., Spring Simulation Multiconference (SpringSim'10), 11-15 April, Philadelphia, United States.  
  
**39.** On Optimizing Survivable Multihoming. Hajabdolali Bazzaza Hamid, Zarifzadeh Sajjad, Khonsari Ahmad, Nayyeri Amir (2009)., The 34th IEEE Conference on Local Computer Networks (LCN), 20-23 October, Zurich, Switzerland.

**HONORS and AWARDS**

**ACADEMIC POSITIONS**

**COURSES OFFERED**

**Computer Networks Laboratory  
  
Performance Evaluation of Computer Systems  
  
Special Topics 1  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Special Topics 2  
  
Computer Networks Laboratory  
  
Performance Evaluation of Computer Systems  
  
Special Topics 1  
  
Advanced Computer Networking  
  
Computer Networks Laboratory  
  
Special Topics 2  
  
Computer Networks Laboratory  
  
Performance Evaluation of Computer Systems  
  
Special Topics 1  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Special Topics 1  
  
Advanced Computer Networking  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Special Topics 1  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Performance Evaluation of Computer Systems  
  
Special Subjects 2  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Seminar  
  
Industrial Training  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Performance Evaluation of Computer Systems  
  
Advanced Computer Networking  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Performance Evaluation of Computer Systems  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks Laboratory  
  
Computer Networks  
  
Data Transmission**

**LABORATORIES**