

Curriculum Vitae

Mahmood Ahmadi

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Professor of Computer Engineering with over 20 years of experience in high-performance networking, software-defined networking, and edge computing. Author of 69+ journal papers with 1925+ citations and h-index 23.

Researcher Identifiers: ORCID: 0000-0003-4110-6824
Scopus Author ID: 24479432000
Web of Science ResearcherID: S-4207-2019

Current position: Professor at Computer Engineering and Information Technology Department, Faculty of Engineering, Razi University, Kermanshah, Iran.

Postdoc	2010 – 2012	Delft University of Technology (TU Delft), Delft, The Netherlands
PhD	2005 – 2010	Delft University of Technology (TU Delft), Delft, The Netherlands Major: Computer Engineering <i>PhD Thesis:</i> “ <i>High-performance Processing in Networked and Grid Environments</i> ” <i>Advisors:</i> Prof. Dr. Stamatis Vassiliadis (IEEE Fellow, ACM Fellow), and Dr. Stephan Wong
M.Sc.	1995 – 1998	Amirkabir University of Technology (Polytechnique Tehran) Tehran, Iran Major: Computer Architecture Minor: Signal Processing Some MS courses: Advanced computer architecture, Digital signal processing, Digital speech signal processing, Microprogramming, Advanced computer networks, structural pattern recognition <i>Thesis:</i> “ <i>Automatic Transcription and Time Alignment of Farsi Speech Database using Gaussian Mixture HMM</i> ” <i>Advisor:</i> Dr. Mohammad Mehdi Homayounpour
B.Sc.	1991 – 1995	Isfahan University Isfahan, Iran Major: Hardware Engineering <i>Thesis:</i> “ <i>Designing and Implementing the Keyboard Sounding System</i> ” <i>Advisor:</i> Dr. Abbas Vafaei

Education:

Online Profiles:

- Google Scholar: <https://scholar.google.com/citations?user=nLI3EwoAAAAJ&hl=en>
- ResearchGate: <https://www.researchgate.net/profile/Mahmood-Ahmadi>
- LinkedIn: <https://ir.linkedin.com/in/mahmoodahmadi>
- Semantic Scholar: <https://www.semanticscholar.org/author/M.-Ahmadi/145441740>

Teaching Experience:

September '1999 to April 2026 (Computer Engineering and Information Technology Department, Razi University, Iran, **Professor**)

- I have been responsible for developing and teaching the following courses:
 - Basic computer programming (C++) (1st year Computer Engineering BSc)
 - Advanced computer programming (C++ & Java) (2nd year Computer Engineering BSc)
 - Data structures concepts (2nd year Computer Engineering BSc)
 - Operating systems concept (4th year Computer Engineering BSc)
 - Computer system architecture (3rd year Computer Engineering BSc)
 - Data communication fundamentals (3rd year Computer Engineering BSc)
 - File systems structure (3rd year Computer Engineering BSc)
 - Computer networks (4th year Computer Engineering BSc)
 - Internet of things fundamentals (4th year Computer Engineering BSc)
 - Advanced computer networks (1st year Computer Engineering MSc)
 - Performance evaluation of computer networks (1st year Computer Engineering MSc)
 - Advanced computer architecture (1st year Computer Engineering MSc)
 - Multimedia networking (1st year Computer Engineering MSc)
 - Storage area networks (1st year Computer Engineering MSc)
 - Architecture of network systems (1st year Computer Engineering PhD)
 - Advanced topics in computer networks (1st year Computer Engineering PhD)
- I have guided more than (119) BSc final projects.
- I have guided (35) MSc students.
- I have guided (9) PhD students.
- I am guiding (7) MSc students.
- I am guiding (6) PhD students.

Supervised Postdoctoral Researchers:

- Dr. Maryam Taghizadeh, "Task scheduling in Vehicular Fog Computing" (2021-2025) – Current position: Assistant Professor, Kermanshah University of Technology

Research Interests: Software defined networking, Named data networking, Internet of Things, Vehicular fog computing, Intrusion detection systems, Application of machine learning in Computer networking, Network function virtualization, Computer architecture and engineering, High-performance computing, Cloud computing, Network processor architectures, Approximate membership query data structures, Packet processing and classification, and Open source networking.

Synopsis: Currently, I am working within two research themes in the Computer Engineering Department, Faculty of Engineering, Razi University, Kermanshah, Iran. Within the **High-performance networking** research theme, I am working on network processing including packet classification, longest prefix matching, routing table design, named data networking, software defined networking, knowledge defined networking, wireless sensor networks, Internet of Things, network function virtualization, and open source networking. Within the **High-performance computing** research theme, I am working on cloud computing, fog computing, vehicular fog & cloud computing, and their networking challenges. A new focus of my research is software defined networking and named data networking and their virtualization. For my Master's thesis, I worked on **Hidden Markov Model (HMM)** to perform automatic time alignment and transcription of Farsi speech databases. This work included two phases: first, model training for the desired system, and second, recognizing of input signals for phoneme and their alignment.

Research Impact

Total Citations (Google Scholar, July 2026): 1925
h-index: 23
i10-index: 55

Memberships:

- IEEE Member
- Member of the ACM
- Member of the HiPEAC

Languages:

- Persian (Native)
- English (Fluent - Academic writing and speaking)

Awards:

1. Academic first rank in computer engineering in Amirkabir University of Technology (Tehran polytechnic) in Iran 1998.
2. Research assistantship grant, Computer and Electronic Engineering Department, University of Nebraska Lincoln, Omaha, USA, 2006.
3. Research scholarship grant, Computer Engineering Research Laboratory, Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology (TU Delft), the Netherlands, 2006.
4. Accepted as research associate at INRIA Rennes, France, 2010.
5. Selected as distinguished researcher in Computer Engineering Department of Razi University, 2013 and 2014.
6. Selected as distinguished researcher in Computer Engineering Department of Razi University, 2017, 2018, 2020 and 2024.
7. Selected as the second distinguished researcher in Engineering faculty of Razi University, 2023.
8. Selected as the distinguished educational professor in engineering faculty of Razi University, 2024.
9. Selected as the distinguished educational professor in engineering faculty of Razi University, 2026.

Professional Activities:

Some recent projects:

- Designing and implementation of a Neomorphonic accelerator with Lille University, 200000000 Rls (20000 Euro) (2015-2017).
- Designing and implementation of forecasting system of Metrological and Climatology Organization of Kermanshah, fund (600000000 Rls), 2017-2018.
- Managing and administrating of IT center of Razi University, 2011-2017.
- Advising of Regional electric company of West area in Kermanshah, 2018-2019 (350000000 Rls).
- Administrating the smart farm using IoT in Kermanshah province, 2019-2020, (2000000000 Rls).

Past research projects:

- An innovative copy detection system using matrix Bloom filters
- Performance analysis of reconfigurable processors using queueing theory
- Bloom-BIRD: A Scalable Open Source Router Based on Bloom Filter
- Mapping network processing tasks on parametrized reconfigurable VLIW processors in ρ -VEX platform

Work experiences and some important academic activities:

1. *1996-1997: Developing of the software system of Parchin chemical technology factory - Tehran, Including analysis and design of the information systems.*

2. 1998-2005: Lecturer at Razi University, Faculty of Engineering, Department of Computer Engineering.
3. 1997-1998: Part time activities at the research council of the Amirkabir University of Technology included programming with SUPRA RDBMS, Tehran, Iran.
4. 1998-2005: Administration and management of the network and IT center at the Razi University, including designing and developing backbone as well as configuring all the university network system servers as the following: Designing backbone, installing network topology, configuring network routers, bridges and switches, configuring servers including Mail, Web, DNS, Cache, and FTP servers.
5. 2003-2005: Management and administration of Computer department of Jahad Daneshgahi University of Kermanshah, Iran.
6. 2002-2005: Member of ICT committee in Kermanshah province, Kermanshah, Iran.
7. 2003: Sponsoring of the Internet application training workshop at the Razi University.
8. 2004: Sponsoring of the training workshop for the network subordinate administrators, Kermanshah, Iran.
9. 2004: Sponsoring of the Internet and computer networks application training Workshop at the Razi University.
10. 2005: Sponsoring of the Linux training Workshop at the Razi University.
11. 2009: Involvement as PC member in the first international conference on adaptive and self-adaptive systems and applications (Adaptive 2009) (<http://www.iaria.org/conferences2009/ComADAPTIVE09.html>).
12. 2010: Involvement as PC member in the second international conference on adaptive and self-adaptive systems and applications (Adaptive 2010) (<http://www.iaria.org/conferences2010/ComADAPTIVE10.html>).
13. 2011: Involvement as PC member in the second international conference on adaptive and self-adaptive systems and applications (Adaptive 2011) (<http://www.iaria.org/conferences2011/ComADAPTIVE11.html>).
14. 2014: Involvement as PC member in the sixth international conference on Information and Knowledge Technology (IKT 2014) (<http://www.ikt-2014.ir/>).
15. 2014: Involvement as PC member in 4th International Conference on Knowledge-Based Engineering and Innovation (KBEI-2017) (<http://kbei.ir/en/>).
16. 2021: Involvement as PC member in International Conference on Smart Systems and Data science 2021 : ICSSD'21 (<https://icssd.net/ICSSD2021/>).
17. 2023: Involvement as PC member in the 7th International Conference on Internet of Things and Its Applications 2023 : IoT2023 (<https://iot2023.ui.ac.ir/>).
18. 2024: Involvement as PC member in the 8th International Conference on Smart Cities, Internet of Things and Applications (SCIoT2024) (<https://sciot2024.um.ac.ir>).

Paper reviews:

1. *Journal of IEEE/ACM Transactions on Networking*
2. *Journal of IEEE Micro*
3. *Journal of IEEE Access*
4. *Journal of IET Communication*
5. *Journal of IEEE Transactions on Computers*
6. *Journal of IEEE Transactions on Intelligent Transportation Systems*
7. *Journal of IEEE Internet of Things Magazine*
8. *Journal of IEEE Journal on Selected Areas in Communications*
9. *Journal of IEEE Communications Magazine*
10. *Journal of Simulation Modelling Practice and Theory*
11. *Journal of IEEE Transactions on Parallel and Distributed Systems (TPDS)*
12. *Journal of Probabilistic Engineering Mechanics*
13. *Journal of Elsevier Communication Networks*
14. *Journal of Elsevier Computer Networks*
15. *Journal of Elsevier Computer Virology and Hacking Techniques*
16. *Journal of Elsevier Computers & Security*
17. *Journal of Elsevier Engineering Applications of Artificial Intelligence*
18. *Journal of Elsevier Future Generation Computing systems*
19. *Journal of Elsevier Concurrency and computation*

20. *Journal of IEEE Communication Letter*
21. *Journal of IEEE Networking Letter*
22. *Journal of Network and Computer Applications*
23. *Journal of Supercomputing*
24. *Journal of Neural computing & applications*
25. *Journal of Wireless Personal Communication*
26. *Journal of IEEE Transactions on Industrial Informatics*
27. *Asia-Pacific Computer System Architecture Conference 2006 (ACSAC2006)*, <http://grid.sjtu.edu.cn/acsac06/index.htm>
28. *Computing Frontiers 2006 (CF06)*, <http://www.computingfrontiers.org/>
29. *IEEE 17th International Conference on Application-specific Systems, Architectures and Processors* <http://asap2006.grm.polymtl.ca/>
30. *International workshop on Applied Reconfigurable Computing (ARC2006) Delft, The Netherlands*, <http://www.arcworkshop.org/arc2006/>
31. *International Conference on High Performance Embedded Architectures and Compilers (HiPEAC2007)*, Ghent, Belgium, <http://www.hipeac.net/hipeac/hipeac2007/>
32. *DATE conference (Design Automation and Test in Europe 2007)* <http://www.dateconference.com>
33. *17th International Conference on Field Programmable Logic and Applications (FPL 2007)*, <http://ce.et.tudelft.nl/FPL/>
34. *16th International Conference Parallel Architecture and Compilation Techniques (PACT 2007)*, <http://pact07.cs.tamu.edu>
35. *International Symposium on Systems, Architectures, Modeling and Simulation (SAMOSVII)*, <http://samos.et.tudelft.nl/samos-vii/>
36. *International Conference on Applied Reconfigurable Computing (ARC2009)*, <http://www.arc-2009.org/>
37. *International Symposium on Systems, Architectures, Modeling and Simulation (SAMOSIX)*, <http://samos.et.tudelft.nl/samos-IX/>
38. *International IEEE Workshop on Signal Processing Systems (SiPS 2009)*, <http://www.sips09.org/>
39. *Journal of System and Software*
40. *23th International Conference on Architecture of Computing Systems (ARCS 2010)*, <http://www.sra.uni-hannover.de/arcs2010/>
41. *6th International Symposium on Applied Reconfigurable Computing (ARC 2010)*
42. *6th International Conference on Information and Knowledge Technology (IKT 2014)*, <http://www.ikt-2014.ir>
43. *4th International Conference on Computer and Knowledge Engineering (ICCKE-2014)*, <http://iccke2014.um.ac.ir/>
44. *5th International Conference on Computer and Knowledge Engineering (ICCKE-2015)*, <http://iccke2015.um.ac.ir/>
45. *4th International Conference on Knowledge-Based Engineering and Innovation (KBEI-2017)*, <https://uai.ac.nz/kbei/>
46. *PC member in 4th International Conference on Smart Cities, Internet of Things and Applications, 2022 (SCIOT-2022)*, <http://sciot2020.um.ac.ir/>
47. *PC member in Ninth International Conference on Internet of Things and Applications (IoT 2025)*, <https://iot2025.uai.ac.ir/>

Reviewer Recognition:

- Outstanding Reviewer Award, Elsevier Simulation Modeling Practice and Theory (2015)
- Outstanding Reviewer Award, Elsevier Computer Networks (2015)
- Exemplary Reviewer Certificate, IEEE Communication letter (2014).

Editorial Activities:

- Member of the editorial board of the journal of Safety Science, published by NEDION Press in the Netherlands.
- Member of the editorial board of the Babylonian Journal of Internet of Things published by Mesopotamian Academic Press / Imam Ja'afar Al-Sadiq University in the Iraq.

Publications:

Books

1. **M. Ahmadi**, "High-performance Processing in Grid and Networked Environments", *LAP Lambert Academic Publishing, ISBN-13: 978-3844391459, May 2011.*

Journal articles

1. B. Mojtabaei Ranani, **M. Ahmadi**, S. Ahmadian "A Q-Learning Approach for Dynamic Resource Management in Three-Tier Vehicular Fog Computing ", in *Journal of Computing and Security, Volume 12, No. 2, February 2025.*
2. M. Taghizadeh, **M. Ahmadi**, "A GWO-Based Approach for Task Scheduling in Heterogeneous Vehicular Fog Computing Environments ", in *Journal of Vehicular Communications, Volume 58, No. 101106, April 2026.*
3. R. Nikbazzm, **M. Ahmadi**, M.P. Toopchinezhad, "Energy-efficient and SLA-aware virtual network function placement using predictive auto-scaling ", in *Journal of Computing, Volume 108, No. 8, January 2026.*
4. M.P. Toopchinezhad, **M. Ahmadi**, "Machine Learning Approaches for Active Queue Management: A Survey, Taxonomy, and Future Directions ", in *Journal of Computer Networks, Volume 262, May 2025.*
5. M. Taghizadeh, **M. Ahmadi**, "Grey Wolf-Based Task Scheduling in Vehicular Fog Computing Systems ", in *Journal of Computing and Security, Volume 11, No. 3, December 2024.*
6. R. Nikbazzm, and **M. Ahmadi**, "Predictive VNF Auto-Scaling based on Genetic Programming ", accepted in *Neural Computing and Applications, 2025.*
7. S. Izadi, and **M. Ahmadi**, "New Fusion Loss Function based on Knowledge Generation using Gumbel-SoftMax for Federated Learning", in *Journal of Supercomputing, Vol .81, No. 33, 2025.*
8. M. Moradi, **M. Ahmadi**, and L. Pourkarimi, "Virtualized network functions resource allocation in network functions virtualization using mathematical programming", in *Computer Communications, Volume 288, December 2024.*
9. M. H. Hussein, **M. Ahmadi**, and F. Mardukhi, "A GWO-MFO-based Resource Allocation in Vehicular Fog Computing with Latency Constraints and Energy Reduction", accepted in *IEEE Access, 2024.*
10. M. H. Hussein, **M. Ahmadi**, and F. Mardukhi, "Vehicular Fog Computing: A Survey of Architectures, Resource Management, Challenges and Emerging Trends ", in *Wireless Personal Communications, Vol. 136, 2024.*
11. B. Sanjabi, and **M. Ahmadi**, "An Intrusion Detection Dystem Based on Deep Learning and Metaheuristic Algorithm for IOT", accepted in *journal of Modeling in engineering, Vol. 22, No. 86, 2024.*
12. B. Ghasemi, **M. Ahmadi**, and H. Alimoahamamdi, "A Neural Gas Network-based Scheme for SDN Many-field Packet Classification", in *Journal of Supercomputing, Vol .80, No. 2, 2023.*
13. P. Abdisarabshali, S. A. Hosseinalipour, M. Liwang, A. Rajabzadeh, **M. Ahmadi**, "Decomposition Theory Meets Reliability Analysis: Processing of Computation-Intensive Dependent Tasks over Vehicular Clouds with Dynamic Resources", in *IEEE/ACM transaction on Networking, Vol. 32, No. 1 2024.*
14. A. Naseri, **M. Ahmadi**, and L. Pourkarimi, "Placement of SDN controllers based on network setup cost and latency of control packets", in *Computer Communications, Volume 208, August 2023.*
15. F. Abdi, **M. Ahmadi**, M. Ghanem 'AM-IF: Adaptive Multi-Path Interest Forwarding in Named Data Networking", in *Future Generation Computer Systems, Vol. 148, November 2023.*
16. A. Sh. Arkan, and **M. Ahmadi**, " An Unsupervised and Hierarchical Intrusion Detection System for Software-Defined Wireless Sensor Networks", in *Journal of Supercomputing, Vol. 79, July 2023.*
17. **M. Ahmadian**, S. Ahmadian, **M. Ahmadi** 'RDERL: Reliable deep ensemble reinforcement learning-based recommender system", in *Knowledge-Based Systems, Vol. 263, March 2023.*
18. A. Mahmoudi, **M. Ahmadi**, "DiCuPIT: Distributed Cuckoo Filter-based Pending Interest Table ", in *Journal of Computing and Security, Volume 9, No. 1, January 2022*
19. A. Mahmoudi, **M. Ahmadi**, "2DNCF-PIT: Two-dimensional neighbor-based cuckoo filter for pending interest table lookup in named data networking ", in *Journal of Network and Systems Management, Volume 30, No. 3, April 2022*
20. R. Nikbazzm, **M. Ahmadi**, "KSN: Modeling and Simulation of Knowledge using Machine Learning in NFV/SDN-based Networks", in *Simulation Modelling Practice and Theory, Volume 121, November 2022*
21. R. Atefi, **M. Ahmadi**, "Performance Evaluation of Apache Spark MLlib Algorithms on an Intrusion Detection Dataset", in *Journal of Computing and Security, Volume 9, No. 1, January 2022*
22. S. Izadi, **M. Ahmadi**, R. Nikbazzm "Network traffic classification using convolutional neural network and ant-lion optimization", in *Computers and Electrical Engineering, Volume 101, July 2022*
23. F. Abdi, **M. Ahmadi**, M. Ghanem 'LA-MDPF: A forwarding strategy based on learning automata and Markov decision process in named data networking", in *Future Generation Computer Systems, Vol. 134, September 2022.*

24. **M. Ahmadian, M. Ahmadi, S. Ahmadian** ‘A Reliable Deep Representation Learning to Improve Trust-aware Recommendation Systems’, in *Expert Systems with Applications*, Vol. 197, July 2022.
25. A. Ahmadian, **M. Ahmadi** “DC-CAMP: Dynamic Controller Creation, Allocation and Management Protocol in SDN”, in *Wireless Personal Communications*, 2022.
26. S. Izadi, **M. Ahmadi**, A. Rajabzadeh “ Network Traffic Classification Using Deep Learning Networks and Bayesian Data Fusion”, in *Journal of Network and Systems Management*, Volume 30, No. 2, June 2022
27. M. Moradi, **M. Ahmadi**, R. Nikbazm “ Comparison of Machine Learning Techniques for VNF Resource Requirements Prediction in NFV”, in *Journal of Network and Systems Management*, Volume 30, No. 1, January 2022
28. A. Sh. Arkan, and **M. Ahmadi**, “Entropy-Based Anomaly Detection Using Observation Points Relations in Wireless Sensor Networks”, accepted in *Wireless Personal Communications*, 2021.
29. A. Naseri, **M. Ahmadi**, and L. Pourkarimi, “Reduction of Energy Consumption and Delay of Control Packets in Software-Defined Networking”, in *Sustainable Computing: Informatics and Systems*, Volume 31, September 2021.
30. R. Atefinia, and **M. Ahmadi**, “ Network Intrusion Detection using Multi-Architectural Modular Deep Neural Network”, in *Journal of Supercomputing*, Volume 77, 2021.
31. H. Alimohammadi, and **M. Ahmadi**, “ Common Non-Wildcard Portion-Based Partitioning Approach to SDN Many-Field Packet Classification”, in *Journal of Computer Networks*, Volume 181, November 2020.
32. M. Al-hisnawi, and **M. Ahmadi**, “ Detecting and Mitigating DDoS Attack in Named Data Networking”, in *Journal of Network and Systems Management*, Volume 28, No. 3, October 2020
33. A. Abdulhassan, and **M. Ahmadi**, “ Many-field Packet Classification Using C-R-Tree”, in *Journal of High Speed Networks*, Volume 26, No. 2, March, 2020
34. H. Alimohammadi, and **M. Ahmadi**, “ Clustering-based many-field packet classification in Software-Defined Networking”, in *Journal of Network and Computer Application*, Volume 147, December 2019.
35. R. Shubbar, and **M. Ahmadi**, “ A Filter-Based Design of Pending Interest Table in Named Data Networking”, in *Journal of Network and Systems Management*, Volume 27, No. 4, October 2019.
36. A. Abdulhassan, and **M. Ahmadi**, “ Cuckoo Filter-based Many-Field Packet Classification using X-tree”, in *Journal of Supercomputing*, Volume 75, No. 9, September 2019.
37. M. Najafimehr, and **M. Ahmadi**, “ SLCF: Single-hash Lookup Cuckoo Filter”, in *Journal of High Speed Networks*, Volume 25, No. 3, September, 2019.
38. R. Shubbar, and **M. Ahmadi**, “ Efficient name matching based on a fast two-dimensional filter in named data networking”, accepted in *International Journal of Parallel, Emergent and Distributed Systems*, Volume 34, No. 2, 2019.
39. S. Soleimanzadeh, **M. Ahmadi**, M. Nasiri, “ SD-WLB: An SDN-aided Mechanism for Web Load Balancing Based on Server Statistics ”, *journal of Electronics and Telecommunications Research Institute (ETRI)* , Volume 41, Issue 2, April 2019, Pages 197-206.
40. M. Al-hisnawi, and **M. Ahmadi**, “ QCF for deep packet inspection”, in *IET Networks*, Volume 7, No. 5, September, 2018
41. M. Fatahi, and **M. Ahmadi**, M. Shahsavari, A. Ahmadi, P. Boulet, and P. Devienne “ Rate-coded DBN: An online strategy for spike-based deep belief networks”, in *Biologically Inspired Cognitive Architectures*, Volume 24, April, 2018
42. S. Abdi, L. Pourkarimi, **M. Ahmadi**, and F. Zargari “ Cost minimization for bag-of-tasks workflows in a federation of clouds”, in *Journal of Supercomputing*, Volume 74, No. 6, June, 2018
43. A. Karamolahi, A. Chalechle, and **M. Ahmadi** “ Energy Consumption Improvement and Cost Saving by Cloud Broker in Cloud Datacenters”, in *The International Arab Journal of Information Technology*, Volume 15, No. 3, May, 2018
44. A. Abdulhassan, and **M. Ahmadi**, “ Many-field Packet Classification Using AMQ-R-Tree”, in *Journal of High Speed Networks*, Volume 24, No. 3, March, 2018
45. R. Falamarzi, B. Bahrambiegi, **M. Ahmadi**, and A. Rajabzadeh “ High-performance multi/many-core architectures with shared and private queues: Network processing approaches”, in *Journal of High Speed Networks*, Volume 24, No. 3, March, 2018
46. A. Arghavani, M. Arghavani, M. Ahmadi, and P. Crane “Attacker-Manager Game Tree (AMGT): A New Framework for Visualizing and Analysing the Interactions Between Attacker and Network Security Manager”, in *Computer Networks*, Volume 133, March, 2018
47. N. Abdolmaleki, **M. Ahmadi**, H. Tabatabaei, and S. Milardo “ Fuzzy topology discovery protocol for SDN-based wireless sensor networks”, in *Simulation Modelling Practice and Theory*, Volume 79, December, 2017

48. R. Shubbar, and **M. Ahmadi**, “Fast 2D Filter with Low False Positive for Network Packet Inspection”, in *IET Networks*, Volume 6, Issue 6, November 2017
49. M. Soursouri, and **M. Ahmadi**, “Adaptive Resource Allocation for Software Defined Networking Controllers”, in *Journal of High Speed Networks*, Volume 23, No. 3, June, 2017
50. S. Abdi, L. Pourkarimi, **M. Ahmadi**, and F. Zargari, “Cost minimization for deadline-constrained bag-of-tasks applications in federated hybrid clouds”, in *Future Generation Computer Systems*, Volume 71, No. 6, June, 2017
51. B. Bharambaeigy, **M. Ahmadi**, M. Fazlali, “Towards accelerating IP lookups on commodity PC routers using Bloom Filter: Proposal of Bloom-Bird”, in *Journal of Information Systems and Telecommunication (JIST)*, Volume 5, No. 1, January, 2017
52. M. Al-hisnawi, and **M. Ahmadi**, “Deep Packet Inspection Using Quotient Filter”, in *IEEE Communication Letter*, Volume 20, No. 11, November, 2016
53. P. Goodarzi, H. Tabatabaei Malazi, and **M. Ahmadi**, “Khorramshahr: A Scalable Peer to Peer Architecture for Port Warehouse Management System”, in *Journal of Network and Computer Applications*, Volume 76, No. 12, December, 2016
54. **M. Ahmadi**, and E. Zadkhosh, “A Customized and Reconfigurable VLIW-based Packet Classifier on p-VEX”, in *Journal of High Speed Networks*, Volume 22, No. 2, June, 2016
55. A. Keramollahi, A. Chalechale and **M. Ahmadi**, “Energy consumption improvement and cost saving by Cloud broker in Cloud datacenters”, in *The International Arab Journal of Information Technology*, Volume 15, No. 5, September, 2018.
56. S. M. Sajjadian, and H. Tabatabaei Malazi and **M. Ahmadi**, “Memory Efficient Routing Using Bloom Filters in Large Scale Sensor Networks”, in *Springer Journal of Personal Wireless Communication*, Volume 83, No. 3, page 1221-1240, August, 2015
57. **M. Ahmadi**, and S. Mehdizadeh Khalifani, “A New look at Hybrid Aloha: An Analytical Approach”, *Elsevier Journal of Computer Networks*, Volume 91, page 689-699, November, 2015.
58. K. Karimi, A. Ahmadi, and **M. Ahmadi**, “Parallel Implementation of Linux Packet Filtering”, *The CSI Journal on Computer Science and Engineering (JCSE)*, Volume 11, Issue 2, 2015, Pages 24-30.
59. A. Arghavani, M. Arghavani, A. Sargazi, **M. Ahmadi**, “Modeling and Stimulating Node Cooperation in Wireless Ad-hoc Networks”, *journal of Electronics and Telecommunications Research Institute (ETRI)*, Volume 37, Issue 1, February 2015, Pages 77-88.
60. Sh. Geravand, and **M. Ahmadi**, “An Efficient and Scalable Plagiarism Checking System using Bloom Filters”, *Elsevier Computers and Electrical Engineering*, Volume 40, Issue 6, August 2014, Pages 1789-1800.
61. Sh. Geravand, and **M. Ahmadi**, “Bloom Filter Applications in Network Security: A State of the Art Survey”, in *Elsevier Computer Networks*, Volume 57, Issue 18, September 2013, Pages 4047-4064.
62. **M. Ahmadi**, A. Shahbahrami and S. Wong, “Collaboration of Reconfigurable Processors in Grid Computing: Theory and Application”, *Journal of Future Generation Computer Systems*, Volume 27, Issue 6, Pages 850-859, June 2011.
63. **M. Ahmadi**, and S. Wong, “A Cache Architecture for Counting Bloom Filters: Theory and Application”, *Journal of Electrical and Computer Engineering*, Volume 2011.
64. R. Isvand Khatami, and **M. Ahmadi**, “High Throughput Multi-Pipeline Packet Classifier on FPGA”, *The CSI Journal on Computer Science and Engineering (JCSE)*, Volume 9, No. 2, 2011, Pages 42-51.
65. R. Rasouli, **M. Ahmadi**, and A. Ahmadvand, “Energy Consumption Estimation in Clustered Wireless Sensor Networks Using M/M/1 Queuing Model”, *International Journal of Wireless and Mobile Networks (IJWMN)*, Vol. 5. No. 1, 2013.

Book chapters

1. S. Anousha, **M. Ahmadi**, “A New Heuristic Algorithm for Improving Total Completion Time in Grid Computing”, in *Multimedia and Ubiquitous Engineering, Lecture Notes in Computer Science*, Volume 308, 2014, pp 17-26, 2014.
2. S. Anousha, **M. Ahmadi**, “An Improved Min-Min Task Scheduling Algorithm in Grid Computing”, in *Advances in Grid and Pervasive Computing, Lecture Notes in Computer Science*, Volume 7861, 2013, pp 103-113, 2013.
3. E. Zadkhosh, S. Fatahi, **M. Ahmadi**, “Performance Analysis of Reconfigurable Processors Using MVA Analysis”, in *Reconfigurable Computing: Architectures, Tools and Applications, Lecture Notes in Computer Science*, Volume 7199/2012, pages 342-349, 2012.
4. **M. Ahmadi**, A. Shahbahrami and S. Wong, “Collaboration of Reconfigurable Processors in Grid Computing for Multimedia Kernels”, in *Advances in Grid and Pervasive Computing, Lecture Notes in Computer Science* Volume 6104, 2010, pp 5-14, 2010.

Conference proceedings

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