Farzad Tashtarian

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My Google Scholar: Click here!   (+98) 9153144496

EDUCATION

Ph.D., Computer Engineering, *September 2009-October 2014*
Ferdowsi University, Mashhad, Iran,
Dissertation: *An Energy-Aware Data Harvesting Algorithm in WSN through Determining the Optimal Trajectory of Mobile Sink*
Supervisor: *Mohammad Hossein Yaghmaee Moghaddam*
Advisors: *Khosrow Sohraby and Sohrab Effati*
Grade=19.12/20

M.Sc., Information Technology, *September 2005-December 2007*
Islamic Azad University, Qazvin, Iran,
Thesis: *Designing a QoS-based Clustering Algorithm for WSN*
Supervisor: *A. Toroghi Haghighat*
Grade=19.02/20

B.Sc., Computer Engineering, *September 2001- September 2005*
Islamic Azad University, Mashhad, Iran ,
Final Project: *Developing a Software to Remotely Control an IP Camera*
Supervisor: *Mehdi Yaghobi*
Grade=16.88/20

RESEARCH INTERESTS

Software-Defined Networking (SDN), Network Function Virtualization (NFV), QoE in Video Streaming, Video Networking, Internet of Things (IoT), Mathematical Modeling and Distributed Optimization.

PROFESSIONAL EXPERIENCE

Department of Computer Engineering,
Islamic Azad University, Mashhad, Iran,
Assistant Professor *November 2014-Present,*
Lecturer *2009-2014*

Department of Electrical and Computer Engineering,
University of Missouri - Kansas City, Kansas City, MO,
Visiting Scholar *February to October 2013*

Department of Computer Engineering,
Ferdowsi University of Mashhad, Mashhad, Iran,
IP-PBX Type Approval Laboratory, Technical Specialist *2010-2014*
Lecturer, *2009-2010*

SUBMITTED PAPERS

OSCAR: On Optimizing Resource Utilization in Real-time Video Streaming,
Erfanian, A., Tashtarian, F. , Zabrovskiy, A.,Timmerer, C., Hellwagner, H.,
submitted to the IEEE Transaction on Network and Service Management (2020)

QoCoVi: A QoE- and Cost-Aware Adaptive video streaming Approach for the Internet of Vehicles,
Tashtarian, F., Erfanian, A.,Timmerer, C., Hellwagner, H.,
submitted to the Computer Communication, Elsevier Journal, (2020)

SELECTED JOURNAL PAPERS

A Novel Framework with an SDN Approach for Throughput Maximization and Balanced Load Distribution in the Cloudlet Network,
Shahryari, S, Hosseini Seno, S.A, and Tashtarian. F,
The Future Generation Computer Systems (2020)

Load-Balancing Algorithm for Multiple Gateways in Fog-based Internet of Things,
Banaie, F., Yaghmae, M.H., Hosseini Seno S.A., Tashtarian, F.,
IEEE Internet of Things Journal (2020)

CoDeC: A Cost-Effective and Delay-Aware SFC Deployment,
Tashtarian. F, M.Faten Zhani, B. Fatemipour, D. Yazdani,
IEEE Transactions on Network and Service Management (2019)

S^{2}VC: An SDN-based Framework for Maximizing QoE in SVC-Based HTTP Adaptive Streaming,
Tashtarian, F., Erfanian. A, and Varasteh, A.,
Elsevier Computer Networks (2018).

Multihop Data Gathering in WSNs with A Mobile Sink,
Tashtarian, F., Sohraby, K., and Varasteh, A.,
International Journal of Communication Systems (2017).

Distributed Lifetime Optimization in Wireless Sensor Networks using Alternating Direction Method of Multipliers,
Tashtarian, F., Montazerolghaem, A., and Varasteh, A.,
International Journal of Communication Systems (2017).

A Load-Balanced Call Admission Controller for IMS Cloud Computing
Montazerolghaem, A., Moghaddam, M.H.Y., Leon-Garcia, A., Naghibzadeh, Tashtarian, F.,
IEEE Transactions on Network and Service Management, January (2016).

Overload Mitigation Mechanism for VoIP Networks: A Transport Layer Approach Based on Resource Management,
Montazerolghaem, A., Hosseini Seno, S. A., Moghaddam, M. H. Y., Tashtarian, F.,
Transactions on Emerging Telecommunications Technologies 27.6 (2016).

Controlling Mobile Sink Trajectory for Data Harvesting in WSNs
Tashtarian, F., Majma, M.R. , Pedram, H., & TakhtFooladi, M.D.,
Wireless Personal Communications 90.3 (2016)

On Maximizing the Lifetime of Wireless Sensor Networks in Even- Driven Applications with Mobile Sinks,
Tashtarian, F., Moghaddam, M. H. Y., Sohraby, K., & Effati, S.,
IEEE Transactions on Vehicular Technology 64.7 (2015).

ODT: Optimal Deadline-based Trajectory for Mobile Sinks in WSN: A Decision Tree and Dynamic Programming Approach,
Tashtarian, F., Moghaddam, M.H.Y., Sohraby, K., & Effati, S.,
Elsevier Computer Networks 77 (2015).

A New Data Dissemination Protocol for Mobile Sink in WSNs,
Tashtarian, F., Majma, M.R., Pedram, H., & TakhtFooladi, M.D.,

Research-Scientific Journal of IAUM (In Persian)(2014).

An Energy-efficient Deadline-based Data Gathering Algorithm In Hierarchical WSN with Mobile Sink,
Tashtarian, F., Moghaddam, M. H. Y., & Effati, S.,
Journal of Interconnection Networks (2013).

A New Application-based Approach for Controlling Trajectory of M obile Sink in Hierarchical Wireless Sensor Network,
Moghaddam, M. H. Y., Tashtarian, F.,& Effati, S.,
Research-Scientific Journal of IAUM (In Persian), (2013).

SELECTED CONFERENCE PAPERS

On Optimizing Resource Utilization in AVC-based Real-time Video Streaming,
Erfanian, A., Tashtarian, F., Farahani, R., Timmerer, C., Hellwagner, H.,
The 6th IEEE International Conference on Network Softwarization (IEEE NetSoft 2020)

On Maximizing QoE in AVC-Based HTTP Adaptive Streaming: An SDN Approach,
Erfanian, A, Tashtarian, F., Moghaddam, M.H.Y,
IWQoS, Alberta, Canada, (2018).

An Optimal Spatial and Temporal Charging Schedule for Electric Vehicles in Smart Grid,
Barabadi, B., Tashtarian, F., and Moghaddam, M.H.Y,
Globecom Dubai, (2018).

Distributed Lifetime Optimization of Wireless Sensor Networks in Smart Grid,
Tashtarian, F., Montazerolghae, A., Nokar MA,
IEEE SEGE, 2018, Oshawa, Canada.

Distributed VNF Scaling in Large-scale Datacenters: An ADMM-based Approach,
Tashtarin, F., Varasteh, A., Montazerolghae, A., & Kellerer. W,
The 17th IEEE International Conference on Communication Technology (ICCT 2017), 27-30 October, Chengdu, China.

On Reliability-Aware Server Consolidation in Cloud Datacenters,
Varasteh, A., Tashtarian, F., & Goudarzi, M.,
The 16th International Symposium on Parallel and Distributed Computing (ISPDC 2017).

Overload Control in SIP Networks: A Heuristic Approach based on Mathematical Optimization,
Montazerolghaem, A., Moghaddam, M.H.Y, & Tashtarian, F.,
The IEEE GLOBECOM 2015, 5-6 December, San Diego, USA.

Energy Efficient Data Gathering Algorithm in Hierarchical WSNs with Mobile Sink,
Tashtarian, F., Moghaddam, M.H.Y, & Effati, S.,
The 2nd IEEE International eConference on Computer and Knowledge Engineering (ICCKE 2012), Mashhad, Iran.

Maximizing the Lifetime of Daley-tolerant Wireless Sensor Networks Using Fuzzy System
Porshokooh, V. R. , Haghighat, A. T., & Tashtarian, F.,
The International Conference on Web Information Systems and Mining, Springer, September, 2011, Berlin, Heidelberg.

EELLER: Energy Efficient-Low Latency Express Routing for WSNs,
Mohebi, A., Tashtarian, F., Moghaddam, M.H.Y , & Honary, M.T.,
The 2nd International Conference on Computer Engineering and Technology (ICCET 2010), 16-18 April Chengdu, China.

Optimal Location for Mobile Sink in Wireless Sensor Networks,
Khodashahi, M.H. , Tashtarian, F., Moghaddam, M.H.Y, & Honary, M.T.,
The IEEE Wireless Communications and Networking Conference (WCNC 2010), 19-21 April, Sydney, Australia.

A New Level Based Clustering Scheme for Wireless Sensor Networks,
Tashtarian, F., Honary, M.T, Mazinani, M., Haghighat, A.T., & Chitizadeh, J.,
The IEEE/ACS International Conference on Computer Systems and Applications (AICCSA 2008), March 31 - April 04, Doha, Qatar.

An Energy Efficient Data Reporting Scheme for Wireless Sensor Networks,
Tashtarian, F., Honary, M.T, Mazinani, M., Haghighat, A.T., Chitizadeh, J.,
The IEEE/ACS International Conference on Computer Systems and Applications (AICCSA 2008), March 31 - April 04, Doha, Qatar.

Optimal Distributed Algorithm for Minimum Connected Dominating Sets in WSNs,
Raei, H. , Sarram, M., Adibniya, F. , & Tashtarian, F.,
The 5th IEEE International Conference on Mobile Ad Hoc and Sensor Systems (MASS 2008), September 29 - October 2, 2008 Atlanta, Georgia.

Directional Rumor Routing in Wireless Sensor Networks,
Shokrzadeh, H., Haghighat, A. T., Tashtarian, F., & Nayebi, A.,
The 3rd IEEE/IFIP International Conference in Central Asia on Internet (ICI 2007), 26-28 September, Tashkent, Uzbekistan.

A Competitive Clustering Scheme for Prolonging the Lifetime of WSNs,
Honary, M. T., Chitizadeh, J., & Tashtarian, F.,
The 6th IEEE International Conference on Information, Communications and Signal Processing (ICICS 2007), 10-13 December, Singapore.

A New Energy-Efficient Level-based Clustering Algorithm for WSNs,
Tashtarian, F., Honary, M. T., Haghighat, A. T., & Chitizadeh, J.,
The 6th IEEE International Conference on Information, Communications and Signal Processing (ICICS 2007), 10-13 December, Singapore.

A New Energy-Efficient Clustering Algorithm for Wireless Sensor Networks,
Tashtarian, F., Haghighat, A. T., Honary, M. T., & Shokrzadeh, H.,
The 15th IEEE International Conference on Software, Telecommunications and Computer Networks (SoftCOM 2007), 27-29 September, Dubrovnik, Croatia.

TEACHING   *Advanced Computer Networks,*   *2014-Present*

Wireless Networks,	*2018-Present*
Computer Networks,	*2009-Present*
Internet Engineering,	*2015-Present*
Data Center Networking,	*2018-2019*
Information Technology,	*2011-2012*
Data Communication,	*2009-2010*

AWARDS AND HONORS

- **Awarded 1st rank**
in Ph.D. entrance exam of Ferdowsi University among more than 200 participants.
- **Awarded 1st rank**
among M.Sc. students in Information Technology, Islamic Azad University of Qazvin.
- **Awarded 4th rank**
in M.Sc. entrance exam among more than 500 participants.
- **Awarded 2nd rank**
among B.Sc. students in Computer Engineering, Islamic Azad University of Mashhad.

OTHER PROFESSIONAL ACTIVITIES

- *Peer-reviewer, IEEE Transactions on on Network and Service Management, 2020*
- *Peer-reviewer, IEEE Transactions on Internet of Things, 2019, 2020*
- *Peer-reviewer, IEEE Transactions on Broadcasting, 2019*
- *Senior IT Consultant, Iran Khodro Khorasan Company (IKKCO), April 2017-February 2020*
- *Member of executive committee (ICTCK 2014-2018)*
- *Member of technical program committee (SCIOT2017,SCIOT2020, ICTCK 2014-2018)*
- *Member of reviewers committee (GLOBECOM2017,2018, WPMC2017, ICCKE 2011-2017)*
- *Member of Young Researchers and Elite Club, Islamic Azad University, 2014-Present*
- *Member of executive committee, Robocup Iran Open 2006, 2006*

LANGUAGES AND SKILLS

Persian (native), English (advanced)
Python, JavaScript, C++, Microsoft Visual Studio .NET, SQL
Mininet, Floodlight SDN Controller, OMNET++ (Castalia)
Pulp, Gurobi, GAMS, Mathematica, MATLAB
Arduino, Linux,

PATENT

Smart Vehicle: an IoT application, Registered in Iran   No.51331, August 2008