



AmirHossein Mohajerzadeh

*Assistant Professor
Department of Computer Science and Engineering
Eqbal Lahoori institute of higher
education, Mashhad, Iran
Email: mohajerzadeh@um.ac.ir
<http://mohajerzadeh.profcms.um.ac.ir>
Phone: +98 915 315 0467*

PERSONAL STATEMENT

I am an Assistant Professor in the Department of Computer Science and Engineering at Ferdowsi University of Mashhad (FUM) since 2015. I received my PhD from FUM. My research interests are in wireless sensor networks (WSNs), target tracking, smart grid, modelling and analyzing computer networks, quality of services (QoS) and fuzzy logic control. Recently, I also have been investigating software defined networking (SDN). I head a research group which focuses on wireless networks, SDN and Smart Grid.

RECENT GRANTS

- "Data centric routing algorithm in software defined networks," Ferdowsi University of Mashhad (FUM).
- "Coverage and scheduling algorithms, for target tracking in wireless sensor networks," Islamic Azad University, Mashhad Branch (IAUM).
- "Supervision, Economic profile enhancement and efficient demand response management with CBS method and social energy network," Khorasan Razavi Electricity Company (KREC).

CURRENT RESEARCH PROJECTS

- Modelling and analyzing communication structure in SDN.
- Modelling and analyzing feasible wireless communication infrastructure in smart grid.
- Coverage and scheduling algorithm for EKF based target tracking in WSN.
- Data transmission algorithm for UKF based target tracking in WSN.

CURRENT POST GRADUATE STUDENTS

- Advising a Ph.D. student at Ferdowsi University of Mashhad (FUM)
- 1 M.Sc. student at FUM
- Advising 2 M.Sc. students at FUM
- 2 M.Sc. students at Imam Reza International University (IRIU)
- 3 M.Sc. students at Islamic Azad University, Mashhad Branch (IAUM)
- 2 M.Sc. students at Payam Noor University (PNM)

I am cooperating part time with IRIU and IAUM.

BOOK

- Book entitled "Installation of computer networks" in Farsi, Khate-Aval press, 2010

JOURNAL PUBLICATION

- A. H. Mohajerzadeh; M. H. Yaghmaee, Vahid Fakoor, "Efficient Data Collecting and Target Parameter Estimation in Wireless Sensor Networks", Journal of Network and Computer Applications, Vol. 57, 2015, Pages 142–155
- A. H. Mohajerzadeh; M. H. Yaghmaee, "Efficient Transmission Scheduling to Estimate Target Parameter in Wireless Sensor Networks", Ad Hoc Sensor Wireless Networks, Accepted, 2015
- A. H. Mohajerzadeh; M. H. Yaghmaee, Vahid Fakoor, "Total Data Collection Algorithm Based on Estimation Model for Wireless Sensor Network", Springer Wireless Personal Communication, Vol. 79, No. 2, DOI 10.1007/s11277-014-2156-6, 2014
- A. H. Mohajerzadeh; M. H. Yaghmaee, Morteza Bigdeli, "A Joint Scheduling and Routing Algorithm for Target Tracking in Wireless Sensor Networks", Ad Hoc Sensor Wireless Networks, Accepted, 2014
- A. A. Rezaee, M. H. Yaghmaee, A. M. Rahmani, A. H. Mohajerzadeh, "HOCA: Healthcare Aware Optimized Congestion Avoidance and control protocol for wireless sensor networks", Journal of Network and Computer Applications, Vol. 37, Pages 216–228, 2014
- A. H. Mohajerzadeh; M. K. Rafsanjani, M. H. Yaghmaee, "MultiPhase, QoS Aware Routing Protocol for Wireless Multimedia Sensor Networks", U. P. B. Scientific Bulletin, Series C, Vol. 75, Iss. 2, 2014
- N. Farzaneh, R. Monsefi, M. H. Yaghmaee, A. H. Mohajerzadeh, "A Novel Congestion Control Protocol with AQM Support for IP-Based Networks", Springer Telecommunications Systems, DOI 10.1007/s11235-011-9559-4, 2013
- A. H. Mohajerzadeh; M. H. Yaghmaee, Vahid Fakoor, "Optimized Task Scheduling for Estimation in Wireless Sensor Networks", International Journal of Information and Communication Technology Research, Vol. 5, No. 2, 2013
- A. H. Mohajerzadeh; M. H. Yaghmaee, "Tree Based Energy and Congestion Aware Routing Protocol for Wireless Sensor Networks", International Journal of Wireless Sensor Network, DOI:10.4236/wsn.2010.22021, 2010

CONFERENCE PUBLICATION (SELECTED)

- A. H. Mohajerzadeh; M. H. Yaghmaee, Vahid Fakoor, "Optimum routing and scheduling for estimation in wireless sensor networks", 2nd International eConference on Computer and Knowledge Engineering (ICCKE), DOI: 10.1109/ICCKE.2012.6395386 2012
- A. H. Mohajerzadeh; M. H. Yaghmaee, N. Najmi, S. Parvizi, A. Hasani, "MREEP: A QoS based routing protocol for wireless multimedia sensor networks", 19th Iranian Conference on Electrical Engineering (ICEE), 2011
- A. H. Mohajerzadeh; M. H. Yaghmaee, "A Fair Routing Protocol Using Generic Utility Based Approach in Wireless Sensor Networks", International Conference on Ultra Modern Telecommunications (ICUMT 2009)
- A. H. Mohajerzadeh; M. H. Yaghmaee, "An Efficient Energy Aware Routing Protocol for Real Time Traffic in Wireless Sensor Networks", International Conference on Ultra Modern Telecommunications (ICUMT 2009)
- A. H. Mohajerzadeh; M. H. Yaghmaee, "An Energy Efficient and QoS Aware Routing Protocol for Wireless Multimedia Sensor Networks", International Conference on Innovations in Information Technology (Innovations 2009)
- A. H. Mohajerzadeh; M. H. Yaghmaee, "An Energy Efficient Data Dissemination Protocol for Wireless Multimedia Sensor Networks", International Conference on Innovations in Information Technology (Innovations 2009)
- A. H. Mohajerzadeh, M. H. Yaghmaee, "Fuzzy Balanced RED, A Queue Management Algorithm", IKT2007, Mashhad, 2007
- A. H. Mohajerzadeh, M. H. Yaghmaee, Z. Eskandari, "Tree Based Energy Efficient and Congestion Aware Routing Protocol for Wireless Sensor Networks", Eleventh IEEE International Conference on Communication Systems, China, November 2008
- A. H. Mohajerzadeh, M. H. Yaghmaee, Z. Eskandari, H. Deldari, "Energy Efficient Routing Algorithms for Wireless Sensor Networks Connected as Hypercube", The 4th International Symposium on telecommunication, IEEE IST 2008
- Z. Eskandari, M. H. Yaghmaee, A. H. Mohajerzadeh, "Learning Automata based Energy Efficient Spanning protocol for Aggregation in Wireless Sensor Networks", Eleventh IEEE International Conference on Communication Systems, November 2008
- Z. Eskandari, M.H. Yaghmaee, A.H. Mohajerzadeh, "Energy Efficient Spanning Tree for Data Aggregation in Wireless Sensor Networks". SN 2008 Workshop at ICCCN 2008

ACADEMIC QUALIFICATIONS

- Ph.D.
Sep. 2008 – Aug. 2014, Ferdowsi University of Mashhad (<http://www.um.ac.ir>)
Faculty of Engineering, Mashhad, Iran
Thesis title: "Joint estimation and routing/scheduling in wireless sensor networks"
Course average: 18.6/20
- M.Sc.
Sep. 2006 – Sep. 2018, Ferdowsi University of Mashhad
Faculty of Engineering, Mashhad, Iran
Course average: 18.73/20

- B.Sc.
Sep. 2004 – Sep. 2006, Ferdowsi University of Mashhad
Faculty of Engineering, Mashhad, Iran
Course average: 16.9/20

TEACHING (selected)

- Fall 2015: Ph.D. and M.Sc. course: Multimedia networking (at Ferdowsi University of Mashhad)
- Fall 2015: B.Sc. course: Data communication (at Ferdowsi University of Mashhad)
- Spring 2015 B.Sc. course: Internet engineering (at Ferdowsi University of Mashhad)
- Fall 2014: M.Sc. course: Advanced networks (at Islamic Azad University)

AWARDS AND HONOURS

- Ranked 1st among more than 100 participants in FUM entrance exam for Ph.D. course
- Ranked 112th among more than 100000 participants in national entrance Exam for M.Sc. course
- Top student in M.Sc. course (Ranked 1st among 16 students)
- Grade satisfactory of thesis: excellent (A) for Ph.D., M.Sc. and B.Sc.
- Selected to receive financial support for M.Sc. thesis by the Ministry of Communications and Information Technology (ITRC), Iran, (<http://www.itrc.ac.ir/>), (2008)

NETWORK PROJECTS (selected)

- "Evaluating performance of IMS-TISPAN architecture and providing congestion control and QoS method in transport layer of NGN", Iran Telecommunication Research Center (ITRC)
- "Resolutions of network control and improving the efficiency ", Khorasan Razavi Electricity Company.
- A member of establishment and set up the IP-PBX type Approval laboratory, Faculty of Engineering, Ferdowsi University of Mashhad (2009-2012), supported by Ministry of Communications and Information Technology (ITRC). (<http://ippbx-lab.um.ac.ir/>)

PEROFSSIONAL SERVICES (selected)

- Technical program committee, the international congress on technology, communication and knowledge 2015
- Technical program committee , 5th international conference on computer and knowledge engineering 2014, 2015
- Reviewer, Springer wireless personal communication Journal

- Reviewer, Springer supercomputing journal
- Reviewer, Springer Journal of network and computer applications