

Curriculum Vitae until Sep. 2026

First Name: **Akbar**

Family Name: **Ghaffarpour Rahbar**

Professor of Computer at Tabriz (Sahand) University of Technology, Sahand
New Town, Tabriz, Iran.

IEEE Senior Member



Language Skills

Azeri(native), Farsi(excellent), English(good)

Education

Sep.2002-Oct.2006: **Ph.D.**, Computer Science, University of Ottawa, Ottawa, Canada, Nominated for the best thesis award.

Sep.1992-Jul.1995: **M. Sc.**, Computer Architecture Engineering, Iran University of Science & Technology,

GPA: 17.26 (out of 20), Rank 1 (out of 6).

Sep.1987-Feb.1992: **B.Sc.**, Computer Hardware Engineering, Iran University of Science & Technology, Tehran, Iran,

GPA: 16.59 (out of 20), Rank 1 (out of 40).

Sep.1983-Jun.1987: **Diploma**, Math and Physics, Dehkhoda high school, Tabriz, Iran, GPA:18.3(out of 20), Rank 1(out of 35).

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Research Interests

Optical networks, Scheduling, IPTV, VANET, Traffic management in high speed networks, Network modeling, Analysis and performance evaluation.

Published Books:

- [2] **Akbar Ghaffarpour Rahbar**, Quality of Service in Optical Packet Switched Networks, **Wiley-IEEE Press**, April 2015, ISBN: 978-1-118-89118-6. (<http://eu.wiley.com/WileyCDA/WileyTitle/productCd-111889118X.html>)
- [1] **Akbar Ghaffarpour Rahbar** and Oliver Yang, OPS Networks: Bandwidth Management & QoS, **VDM Verlag**, Germany, Sep. 2009.

Published Book Chapters:

- [7] Sajjad Zare, Seyyed Mohammad Hosseini Verki and **Akbar Ghaffarpour Rahbar**, "Channel Zapping Time in IPTV: Challenges and Solutions", Book Chapter in Book "IPTV Delivery Networks: Next Generation Architectures for Live and Video-on-Demand Services," Editor: Dr. Al-Sakib Khan Pathan, John Wiley & Sons, June 2018.
- [6] Amin Ebrahimzadeh, **Akbar Ghaffarpour Rahbar**, "Greening Data Centers", Book "Green Networking and Communications", CRC Press, USA, 2015.
- [5] Sepideh Nikmanzar and **Akbar Ghaffarpour Rahbar**, "Request-based Multicasting in Video-on-Demand Systems", book chapter, in Book "Building Next-Generation Converged Networks: Theory and Practice", **CRC Press, Taylor & Francis Group**, USA, 2013.
- [4] Mohammad Ali Mohseni and **Akbar Ghaffarpour Rahbar**, "Green Optical Core Networks," book chapter in book "Handbook of Green Information and Communication Systems", **AP, Elsevier**, 2013.
- [3] Sajjad Zare, **Akbar Ghaffarpour Rahbar**, "IPTV Challenges and Solutions in Metro Networks", Book Chapter in Book "Advancements in Distributed Computing and Internet Technologies: Trends and Issues," Editor: Dr. Al-Sakib Khan, **IGI-Global Publishers**, USA, 2012.
- [2] Ameneh Daeinabi, **Akbar Ghaffarpour Rahbar**, and Wail Mardini, "Protection of Unicast and Multicast Traffic in WDM Mesh Networks: A Survey," Book Chapter in Book Computer Science Research and Technology, Volume 2, Editor: Janice P. Bauer, **Nova Publishers**, New York, USA, 2011.
- [1] Ameneh Daeinabi, and **Akbar Ghaffar Pour Rahbar**, "Clustering, Connectivity, and Monitoring Challenges in Vehicular Ad hoc Networks", Book Chapter in Book "Advances in Vehicular Ad-Hoc Networks: Developments and Challenges," Editor: Dr. Mohamed Watfa, **IGI Global Publishers**, USA, pp.257-281, April 2010.

Referred Journal Articles

- [95] Elham Derakhshi, **Akbar Ghaffarpour Rahbar**, and Sima Sobhi-Givi, "DRL-Based Energy-Efficient Secure Transmission in RIS-Aided Mixed FSO-RF System with Simultaneous Eavesdropping," **IEEE Transactions on Vehicular Technology**. (JCR).
- [94] Sajjad Zare, Ahmad Khonsari, **Akbar Ghaffarpour Rahbar**, and Masoumeh Moradian, "FEC-Enabled Multicast Routing and Spectrum Assignment in Elastic Optical Networks: MILP Formulation and Heuristic Solution," **IEEE Journal of Optical Communications and Networking**, vol. 18, no. 9, pp. 1017-1028, Sept. 2026. (JCR).

- [93] Yaghoub Khorasani, **Akbar Ghaffarpour Rahbar** and Mohammad Jafari Beyrami, "Routing and Spectrum Allocation in Elastic Optical Networks under Unicast and Multicast Traffic: A Survey," *Elsevier Optical Switching and Networking*, vol.60, March 2026. (JCR).
- [92] Sajjad Zarea, Ahmad Khonsari, **Akbar Ghaffarpour Rahbar**, Masoumeh Moradian, "Reinforcement Learning-Driven Multicast Routing in Elastic Optical Networks: A Multi-Objective Cost Optimization Framework", *Elsevier Optical Fiber Technology*, vol.95, Dec.2025 (JCR)
- [91] Sarah Sarraf-Maralaniyan and **Akbar Ghaffarpour Rahbar**, " Routing, Modulation-Level, Core and Spectrum Assignment Schemes for Dynamic Multicast Traffic in SDM-EONs ," *Elsevier Computer Networks*, vol.269, Sep.2025. (JCR)
- [90] Leila Asadzadeh, Ahmad Khonsari and **Akbar Ghaffarpour Rahbar**, "Efficient Fragmentation-Aware Algorithms for Multicast Traffic in Elastic Optical Networks with a Novel Demand Size based Fragmentation Metric", *Elsevier Optical Fiber Technology*, vol.93, Sept.2025. (JCR)
- [89] Atefeh Bagherzadeh, **Akbar Ghaffarpour Rahbar**, and Yaghoub Khorasani, "REFC: Reduction of Energy Consumption, Fragmentation and Crosstalk in SDM-EON," *Elsevier Optical Fiber Technology*, vol.90, March 2025. (JCR)
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- [87] Mahdiyeh Hafezi and **Akbar Ghaffarpour Rahbar**, "Fragmentation-Aware with core Classification Algorithms for Spectrum Allocation in Elastic Optical Networks-Space Division Multiplexing (SDM-EON), *Elsevier Optical Fiber Technology*, vol.82, Jan.2024. (JCR)
- [86] Yaghoub Khorasani, **Akbar Ghaffarpour Rahbar**, and Behrooz Alizadeh, "A Novel Adjustable Defragmentation Algorithm in Elastic Optical Networks", *Elsevier Optical Fiber Technology*, vol.82, Jan.2024. (JCR)
- [85] Yaghoub Khorasani, **Akbar Ghaffarpour Rahbar**, and Mohammad Jafari-Beyrami, "Fragmentation Management to Reduce Bandwidth Wastage in SDM-EON Networks," *Springer Photonic Network Communications*, vol.46, no.2-3, 26 Oct.2023, pp.51-67.(JCR)
- [84] Sarah Sarraf-Maralaniyan and **Akbar Ghaffarpour Rahbar**, "MT3A: A Novel Multicast Routing, Spectrum and Modulation-Level Assignment in Elastic Optical Networks," *Computer Networks*.
- [83] Yaghoub Khorasani, **Akbar Ghaffarpour Rahbar**, and Mohammad Jafari-Beyrami, "A Novel Two-Dimensional Metric for Fragmentation Evaluation in Elastic Optical Networks," *Elsevier Computer Networks*, vol.216, 24 October 2022, (JCR).
- [82] Arezou Mahmoudi, **Akbar Ghaffarpour Rahbar**, Mohammad Jafari-Beyrami, "QoS-Aware Routing, Space, and Spectrum Assignment in Space Division Multiplexing Networks, *Elsevier Computer Networks*, Volume 208, 8 May 2022, 108920. (JCR).
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- [78] Mohammad Jafari-Beyrami, **Akbar Ghaffarpour Rahbar**, and Soheil Hosseini "On-Demand Fragmentation-Aware Spectrum Allocation in Space Division Multiplexed Elastic Optical Networks with Minimized Crosstalk and Multipath Routing," *Elsevier Computer Networks*, vol.181, Nov 2020.
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- [61] Lida Ghaemi and **Akbar Ghaffarpour Rahbar**, "PAHON: Power-Aware Hybrid Optical Network", *Elsevier Journal of Parallel and Distributed Computing*, vol.117, no.7, July 2018, pp. 1-16.
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- [56] Sajjad Zare and **Akbar Ghaffarpour Rahbar**, "Program-Driven Approach to Reduce Latency During Surfing Periods in IPTV Networks," *Springer Multimedia Tools and Applications (JCR)*, vol.75, no.23, Dec.2016, pp. 16059–16071. **(Q2)**
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- Optical Networks,” *Elsevier Optical Switching and Networking*, vol.22, no.2, Nov.2016, pp. 117-128. (Q2)
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- [53] Mohammad Saleh Mehri and **Akbar Ghaffarpour Rahbar**, "DIM: A New Scheduling Algorithm for Agile All Photonic Networks," *The International Information Technology Conference*, Tehran, Iran, Jul.2015.
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- [21] Fatemeh Hourali and **Akbar Ghaffar Pour Rahbar**, "RFID and Wireless Sensor Networks", *First Seminar on Telecommunication Protocols and Standards*, East Azarbaijan Telecommunication Center, Tabriz, Iran, Mar.2008.
- [20] Nasibeh Alijanpour Shalmany, **Akbar Ghaffar Pour Rahbar**, "On the Choice of All-Optical Switches for Optical Networking," *Proc. IEEE 4th International Symposium on High Capacity Optical Networks and Enabling Technologies (HONET07)*, UAE, Dubai, Nov.2007.
- [19] **Akbar Ghaffar Pour Rahbar**, "An Approach to Improve TCP Throughput of Long-hop Connections in Bufferless OPS Networks," *Proc. IEEE 4th International Symposium on High Capacity Optical Networks and Enabling Technologies (HONET07)*, UAE, Dubai, Nov.2007.
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- [14] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "Retransmission in Slotted Optical Networks," *Proc. IEEE High Performance Switching and Routing (HPSR)*, Poznan, Poland, June 2006, pp.21-26.
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- [9] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "The Output-Controlled Round Robin Scheduling in Differentiated Services Edge Switches," *Proc. IEEE BROADNETS 2005*, Boston, USA, Oct. 2005, pp.237-245.
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- [6] Mushi Jin, Oliver Yang, Yiming Zhang, **Akbar Ghaffar Pour Rahbar**, and W.Yang, "Applying Time-Division-Multiplexing in Star-Based Optical Networks," *Proc. IEEE Canadian Conf. on Electrical and Computer Engineering (CCECE 2005)*, Saskatoon, Saskatchewan Canada, May 2005.
- [5] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "Slot Contention Resolution for Distributed TDM Scheduling in an Optical Star Network," *Proc. IEEE Canadian Conf. on Electrical and Computer Engineering (CCECE 2005)*, Saskatoon, Saskatchewan Canada, May 2005, pp.286-289.
- [4] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "Modeling and Simulation of Fuzzy Based Jitter Management for Voice Communications", *OPNETWORKS-2004*, Washington, USA, Aug. 2004.
- [3] **Akbar Ghaffar Pour Rahbar**, Oliver Yang and Frank Zhang, "Performance Evaluation of a Fuzzy Based Jitter Management Algorithm," *Proc. IEEE Canadian Conf. on Electrical and Computer Engineering (CCECE 2004)*, Niagara Falls, Canada, May 2004.
- [2] **Akbar Ghaffar Pour Rahbar**, "A Method to Detect the Existence of a Point in an Enclosed Region of an Image", *Proc. the First Iranian Conf. on Machine Vision & Image Processing*, Birjand, Iran, Mar.2001, pp.123-129.
- [1] **Akbar Ghaffar Pour Rahbar**, M.R.Jahed, and M.Fathi , "Heart Arrhythmia Detection using Fuzzy logic", *Proc. 3rd Iranian Conference on Electrical Engineering*, Tehran, Iran, 1995.

Non-Referred Publications (Posters, Technical Reports, Presentations, etc.)

- [12] **Akbar Ghaffarpour Rahbar**, Invited Talk, "Contention Avoidance Schemes in Optical Packet Switched Networks", *The second Asian Symposium on Electromagnetics and Photonics Engineering*, August 28-30, 2013, Tabriz, Iran.
- [11] Hussein Soleymani and **Akbar Ghaffar Pour Rahbar**, "Vehicle Identification in Sensor Networks," *Artificial Intelligence & Instrumentation Magazine*, vol.5, no.3, Aug.2011, pp.46-48. (Persian)
- [10] **Akbar Ghaffar Pour Rahbar**, "IPTV", invited talk, *3rd Seminar on Information Age*, Tabriz University, Tabriz, Iran, Nov. 2011.
- [9] **Akbar Ghaffar Pour Rahbar**, Documentation of "Bandwidth Access in Slotted OPS Networks Considering Quality of Service", Research Project Technical Report, Department of Electrical Eng., Sahand Univ. of Tech, Iran, May 2010.
- [8] **Akbar Ghaffar Pour Rahbar**, Documentation of "Design of Optimum Routing Algorithm for WDM Network", Research Project Technical Report, Department of Electrical Eng., Sahand Univ. of Tech, Iran, Feb. 2010.
- [7] **Akbar Ghaffar Pour Rahbar**, Documentation of "Design of New Techniques for Contention Avoidance in Optical Packet Switched (OPS) Networks", Research Project Technical Report, Department of Electrical Eng., Sahand Univ. of Tech, Iran, Aug.2008.
- [6] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "Ingress Switch Architectures in Slotted AAPN Network," poster in *AAPN Annual Research Review conference*, Ottawa, Canada, June 2006.
- [5] Mushi Jin, **Akbar Ghaffar Pour Rahbar**, and Oliver Yang, "Comparison Analysis of Two Scheduling Schemes in AAPN Networks," poster in *AAPN Annual Research Review conference*, Ottawa, Canada, June 2006.
- [4] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "Distributed TDM vs. Centralized TDM Scheduling Algorithms," poster in 2005 *AAPN Annual Research Review (ARR) conference*, Ottawa, Canada, June 2005.
- [3] **Akbar Ghaffar Pour Rahbar** and Oliver Yang, "How Important is Scheduling in a Single-Hop Optical Network," *2nd Workshop on Optimization of Optical Networks (OON 2005)*, Montreal, Canada, Apr. 2005.
- [2] **A.Ghaffar Pour Rahbar** and A.Choobdar, "**Flood Forecasting**", *research project* , Department of Electrical Engineering, Sahand University of Technology, 1999.
- [1] **Akbar Ghaffar Pour Rahbar**, "Computer-Controlled Robots", *Technical report*, Iran University of Science & Technology, 1994.

Research Theses

- [3] Akbar Ghaffar Pour Rahbar, *Bandwidth Management in Slotted All-Optical Packet-Switched Networks under the DiffServ Domain*, PhD dissertation, University of Ottawa, Ottawa, Canada, Nov.2006, Nominated for thesis award.
- [2] Akbar Ghaffar Pour Rahbar, *Heart arrhythmia detection using Fuzzy Logic*, M.Sc. Thesis, Iran University of Science & Technology, Tehran, Iran, Jun 1995.
- [1] Akbar Ghaffar Pour Rahbar, *Design and implementation of a X-Y recorder*, B.Sc. Thesis, Iran University of Science & Technology, Tehran, Iran, March 1992.

Academic Activities

Faculty member at Sahand university of Technology:

Nov.1995 to Sep.2002: **Lecturer**, Dept. of Electrical Eng., Sahand University of Technology, Tabriz, Iran

Oct.2006 to Sep. 2010: **Assistant Professor**, Dept. of Electrical Eng., Sahand Univ. of Technology, Tabriz, Iran

Sep.2010 to Dec.2014: **Associate Professor**, Dept. of Electrical Eng., Sahand Univ. of Technology, Tabriz, Iran

Jan. 2015: **Professor**, Dept. of Electrical Eng., Sahand Univ. of Technology, Tabriz, Iran

Misc. Activities in other universities:

1993 to 1995 : **Lecturer**, Computer Engineering Department, Iran University of Science & Technology, Tehran, Iran.

1996 to 1997 : **Lecturer**, Dept. of Electrical Eng., Tabriz University, Tabriz, Iran.

1996 to 2001 : **Lecturer**, Payam Noor University, Tabriz, Iran

1997 to 2001 : **Lecturer**, Industrial Management Institute, Tabriz, Iran

2000 to 2001 : **Lecturer**, Jihad Daneshgahi Institute, Tabriz.

Professional Activities

- Editor-in-Chief of Journal of Nonlinear Systems in Electrical Engineering.
- Editor of Wiley Transactions on Emerging Telecommunications Technologies Journal, March 2011-2014.
- Associate Editor of International Journal of Advances in Optical Communication and Networks (IJAOCN), Dec.2010-2012
- Associate Editor of Journal of Convergence Information Technology, Advanced Institute of Convergence IT (AICIT), Dec.2010-2012
- **IEEE Membership**
 Senior member: Feb. 2012 to present
 Member: 2007 to Feb. 2012

Student member: 2004 to 2006

- **OSA Membership**

Member: 2008, 2010 - 2012

Student member: 2006

- Reviewer for different journals: IEEE Journal of Optical Communications and Networking, IEEE Transactions on Computers, IEEE Communications Letters, ETRI Journal, IJECE Journal, Elsevier Computer Networks, Elsevier Performance Evaluation, Springer Telecommunication systems, Wiley Security and Communication Networks.
- TPC member of First Computer Science Conference on Computer and Information Technology, Nov.2011, Tabriz University, Tabriz, Iran.
- TPC member of Extending Industrial Applications of Information, Communications and Computations (EIA-ICC) Conference, Feb.2012, Shahid Madani University, Tabriz, Iran.
- TPC member of International Workshop on Converged Networks, Technologies and Applications (CNTA 2013), In conjunction with ICNC 2013, San Diego, USA, January 28-31, 2013.
- TPC member of Networking and Electronic Commerce Research Conference 2013 (NAEC 2013), Riva del Garda, Italy, October 17- 20, 2013.
- TPC member of Second Computer Science Conference on Computer and Information Technology, Nov.2014, Tabriz University, Tabriz, Iran.
- Reviewer for different conferences: IEEE ICC, IEEE GLOBECOM, IEEE International Symposium on Telecommunications (IST), Iranian Conf. on Electrical Engineering (ICEE).

Awards

- Distinguished professor at Sahand University of Technology, 2016.
- Distinguished researcher in department of Electrical Engineering, Sahand University of Technology: 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007.
- Distinguished researcher in Engineering in Azarbaijan Sharqi province, 2012.
- Distinguished educator at department of Electrical Engineering, 2011, 2012.
- Ph.D. thesis nominated for the best thesis at computer science department, University of Ottawa, 2006.
- Full Ph.D. scholarship awarded by Ministry of Science, Research, Technology of Iran, 2002.

Taught courses

Graduate: Provision of QoS in Computer Networks, Optical Networks, Performance Evaluation of Computer Networks, Advanced Computer Networks, Data Communication Networks, Wireless Networks.

Undergraduate: Microprocessors(8086, 8085, MCS8051, Z80), Computer Architecture, Logic Circuits, Data Structures, Interfacing Circuits, Programming Languages, Numerical Calculations, Information Storage and Retrieve, Assembly Language Programming, Informatics Systems, Fundamentals of Computer Programming, Artificial Intelligence, Advanced Computer Programming (C , Pascal , Basic , Fortran , and Foxpro), Microprocessor lab, Computer Architecture and Logical Circuits Lab.

Completed Research Projects:

	Title of Research Project	Name of Manager	Employer	Finish Date
1	Flood Forecasting Model for North West of Iran (Data Collection and Information Processing)	Asgar Chobdar and Akbar Ghaffarpour Rahbar	Sahand University of Technology	July 1999
2	Flood Forecasting Model for Ajichai Domain	Asgar Chobdar and Akbar Ghaffarpour Rahbar	Sahand University of Technology	January 2004
3	Design of New Techniques for Contention Avoidance in Optical Packet Switched (OPS) Networks	Akbar Ghaffarpour Rahbar	Sahand University of Technology	August 2008
4	Design of Optimum Routing Algorithm for WDM Networks	Akbar Ghaffarpour Rahbar	East Azarbaijan Telecommunication Research Center , Iran	February 2010
5	Bandwidth Access in Slotted OPS Networks Considering Quality of Service	Akbar Ghaffarpour Rahbar	Sahand University of Technology	May 2010

Supervised Master & PhD Theses:

	MSc / PhD	Title of Thesis	Student Name	Supervisor / Advisor	Defense Date	University	Financially Supported by
1	M.Sc of Communications	Secure Communication Among Vehicles in Vehicular Ad Hoc Networks (VANET)	Ameneh. Daeinabi	Supervisor (Advisor: Dr. Khademzadeh)	19 Dec. 2008	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
2	M.Sc of Communications	QoS Improvements for WDM Optical Networks Using Rerouting	Amir Kakekhani	Supervisor	13 Jan. 2009	Sahand University of Technology	-
3	M.Sc of Information Technology	Dynamic Bandwidth Allocation in Passive Optical Networks	Mustafa Vahabzadeh	Supervisor	3 July 2010	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
4	M.Sc of Information Technology	QoS Improvements for Internet Protocol TV (IPTV) in Metropolitan Networks	Sajjad Zare	Supervisor	3 July 2010	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
5	M.Sc of Information Technology	Improving Fairness in All-Optical Networks	Saeed Barkabi	Supervisor	1 Feb. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
6	M.Sc of Information Technology	Packet Loss Rate Analysis in OPS Networks	Mehdi Shamsi	Supervisor	9 Feb. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
7	M.Sc of Information Technology	Improvement of Packet Scheduling in WiMAX	Shahram Khoshnavaz	Supervisor	25 Apr. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)

8	M.Sc of Information Technology	Dynamic Bandwidth Allocation in Ethernet-based Passive Optical Networks (PONs) and Long Reach PONs Considering Quality of Service	Ali Razmkhah	Supervisor	10 Sept. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
9	M.Sc of Information Technology	IPTV in Cellular Networks	Ali Athari	Supervisor	17 Sept. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
10	M.Sc of Information Technology	Improvement of IPTV Services in Access Networks Domain	Hamed Shahbazifard	Supervisor	18 Sept. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
11	M.Sc of Information Technology	Opportunistic Routing in Vehicular Ad Hoc Networks in City Environments	Marzieh Barootkar	Supervisor (Advisor: Dr. Sabae)	26 Sept. 2011	Sahand University of Technology	-
12	M.Sc of Information Technology	Cost Effective Contention Resolution and Avoidance Schemes in Bufferless Optical Packet Switching Networks	Saeedeh Asemani	Supervisor	23 Nov. 2011	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
13	M.Sc of Information Technology	Intrusion Detection in AODV routing in VANET	Mahdi Asghari Kahanmouei	Supervisor	23 Nov. 2011	Sahand University of Technology	-
14	M.Sc of Information Technology	A New Heuristic Delivery Video Scheme for VoD Service in Optical Access Networks	Sepideh Nikmanzar	Supervisor	14 Jul. 2012	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
15	M.Sc of Information Technology	Bandwidth Allocation to IPTV Services in Access Networks	Kian Abdollahi	Supervisor	24 Sept. 2012	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
16	M.Sc of Information Technology	Improvement of Energy Consumption in Optical Networks	Mohammad Ali Mohseni	Supervisor	24 Sept. 2012	Sahand University of Technology	-
17	M.Sc of Information Technology	Improvement of Handover in LTE networks	Elham Khalili	Supervisor	19 Nov. 2012	Sahand University of Technology	Iran Telecom. Research Center (ITRC)
18	M.Sc of Information Technology	Congestion Control in Fiber-Wireless (FiWi) Access Networks	Yavar Rashidpour	Supervisor	7 Sep. 2013	Sahand University of Technology	-
19	M.Sc of Information Technology	Optimization of Information Transmission in Cellular Networks	Maryam Esmaeilifard	Supervisor	7 Sep. 2013	Sahand University of Technology	-
20	M.Sc of Information Technology	Bandwidth Allocation Management of Light-Trail in Optical-Wireless Networks for High-Speed Metro-Train Systems	Azadeh Faroughi	Supervisor	1 Oct. 2013	Sahand University of Technology	-
21	M.Sc of Information Technology	Bandwidth and Wavelength Allocation Improvement in WDM-PON	Siavosh Golabi	Supervisor	20 Jan. 2014	Sahand University of Technology	-
22	M.Sc of Information Technology	An Approach for Improving Channel Zapping Time in IPTV/WiMAX	Abdol Agheli Khosrowshahi	Second Supervisor	19 Feb. 2014	Urmia University	-
23	M.Sc of Information Technology	Novel Contention Avoidance Approaches in Bufferless Optical Packet Switched Networks	Masoud Asghari	Supervisor	May 2014	Sahand University of Technology	-
24	M.Sc of Information Technology	Energy Consumption, Cost and Quality of Service Improvement in Elastic Optical Networks	Forough Shirin Abkenar	Supervisor	3 June 2014	Sahand University of Technology	-
25	M.Sc of Information Technology	Improving Quality of Service in Mobile Internet protocol Television (IPTV) on LTE Cellular Networks	Mohammad Yazdanpanah	Supervisor	Nov. 2014	Sahand University of Technology	-
26	M.Sc of Information Technology	Dynamic Bandwidth Allocation in Long-Reach PONs	Morteza Ahmadi	Supervisor	3 Jan. 2015	Sahand University of Technology	-

27	Ph.D. of Communications	Design and Analysis of Energy Efficient Impairment Aware Routing and Wavelength Assignment Algorithms in All Optical Data Center Interconnection Networks	Amin Ebrahimzadeh	Supervisor (Advisor: Dr. Behrooz Alizadeh)	2 Sept. 2015	Sahand University of Technology	-
28	M.Sc of Information Technology	Novel Scheduling Algorithms for All-Optical AAPN Networks	Mohammad Saleh Mehri	Supervisor	Oct. 2015	Sahand University of Technology	-
29	M.Sc of Information Technology	Optimizing Bandwidth in Hybrid Optical Networks	Lida Ghaemi	Supervisor	Oct. 2015	Sahand University of Technology	-
30	M.Sc of Information Technology	Effective Optical Packet Switching in Ring Optical Networks	Faeze Hampaci	Supervisor	Feb. 2016	Sahand University of Technology	-
31	M.Sc of Information Technology	Contention Resolution in Optical Packet Switched Networks	Shahryar Didevara	Supervisor	Sept. 2016	Sahand University of Technology	-
32	M.Sc of Information Technology	Active Rerouting in All-Optical Networks	Mahila Samet	Supervisor	Sept. 2016	Sahand University of Technology	-
33	M.Sc of Information Technology	Bandwidth Provisioning in Integrated Light Trail-LTE Network	Iman Bagherpour Khoshki	Supervisor	Nov. 2016	Sahand University of Technology	-
34	M.Sc of Information Technology	Improvement of 5G Wireless Networks	Ghazal Mesbahi	Supervisor	Oct. 2017	Sahand University of Technology	-
35	M.Sc of Information Technology	Bandwidth Allocation in Elastic Optical Networks	Shirin Haj Ahmadi	Supervisor	Jan. 2018	Sahand University of Technology	-
36	M.Sc of Information Technology	Reducing Energy Consumption in Cloud Computing	Maede Yavari	Supervisor	Jan. 2018	Sahand University of Technology	-
37	M.Sc of Information Technology	Resource Allocation in Space Division Multiplexing Elastic Optical Network (SDM-EON) for Different Switching Solutions	Amin Ghadesi	Supervisor	Feb. 2018	Sahand University of Technology	-
38	M.Sc of Information Technology	Energy-Aware Elastic Optical Networks (EA-EONs)	Asiyeh Abi Kisomi	Supervisor	Feb. 2018	Sahand University of Technology	-
39	M.Sc of Information Technology	Improvement of Fragmentation Problem in Elastic Optical Networks	Faezeh Yousefi	Supervisor	Feb. 2018	Sahand University of Technology	-
40	M.Sc of Information Technology	Grooming in Elastic optical Networks	Mina Hosseini	Supervisor	Feb. 2018	Sahand University of Technology	-
41	M.Sc of Information Technology	An Scheduling Algorithm for Optical Buffers in Optical Packet Switched Networks	Fahimeh Bayani	Supervisor	Feb. 2018	Sahand University of Technology	-
42	M.Sc of Information Technology	Energy Efficient Routing in IoT	Marjan Farahani	Supervisor	May 2018	Sahand University of Technology	-
43	Ph.D. of Communications	Optimizing the Route, Modulation Level, Space and Spectrum Assignment Problem in Space Division Multiplexing- Elastic Optical Networks	Mohsen Yaghoubi	Supervisor	Sept. 2018	Sahand University of Technology	-
44	M.Sc of Information Technology	Improvement of Architecture-on-Demand Approach on Space-Division Multiplexing Switches	Maryam Hosseini	Supervisor	Oct. 2018	Sahand University of Technology	-
45	M.Sc of Information Technology	Improvement of Routing and Spectrum Assignment in EON-SDM Networks	Arezou Mahmoudi	Supervisor	Feb. 2019	Sahand University of Technology	-
46	M.Sc of Information Technology	Survivability in Elastic Optical Networks	Zeinab Ahmadi	Supervisor	Feb. 2019	Sahand University of Technology	-
47	Ph.D. of Information Technology, E-Commerce	Providing New Methods for Improving Defragmented Frequency Spectrum in Elastic Optical Networks	Ali Athari Beyragh	First Supervisor	June 2019	Qom University	-

48	M.Sc of Information Technology	Routing, Core and Spectrum Assignment for Protected Space Division Multiplexing Elastic Optical Networks	Soheil Hosseini	Supervisor	June 2019	Sahand University of Technology	-
49	M.Sc of Information Technology	The Improvement of Bandwidth Fragmentation Problem in SDM-EON with Multi-core Fibers	Mohammad Jafar Beyrami	Supervisor	Sept. 2019	Sahand University of Technology	-
50	M.Sc of Information Technology	Authentication in internet of Things	Sharaeh Amiri	Supervisor	Sept. 2019	Sahand University of Technology	-
51	M.Sc of Information Technology	Fragmentation in Elastic optical Networks	Elham Poukarimi	Supervisor	Oct. 2020	Sahand University of Technology	-
52	M.Sc of Information Technology	Evaluation of Survivable Elastic Optical Networks Considering Restoration Concepts	Shima Koulaei Zadeh	Supervisor	Oct. 2021	Sahand University of Technology	-
53	M.Sc of Information Technology	The Improvement of Survivability and Restoration in Optical Networks	Saba Shakuri	Supervisor	Sept. 2021	Sahand University of Technology	-
54	M.Sc of Information Technology	Improvement in Bandwidth Fragmentation Problem in SDM-EON based on Core Classification	FatemehZahra JalaviNezhad	Supervisor	Oct. 2021	Sahand University of Technology	-
55	M.Sc of Information Technology	Multicasting in Elastic Optical Networks	Fateme Zavvari Fesaghandis	Supervisor	Sept. 2022	Sahand University of Technology	-
56	M.Sc of Information Technology	Survivability in Elastic Optical Networks	Saba Hoseinpour Nourani	Supervisor	Sept. 2022	Sahand University of Technology	-
57	M.Sc of Information Technology	Fragmentation in Elastic Optical Networks	Mahdiyeh Hafezi	Supervisor	Sept. 2022	Sahand University of Technology	-
58	Ph.D. of Communications	Reducing the Wastage of Resources and Maintaining the Integrity of the Spectrum in Elastic Optical Networks	Yaghoub Khorasani	Supervisor	Oct. 2023	Sahand University of Technology	-
59	M.Sc of Computer Networks	Energy Consumption Reduction in Elastic Optical Networks (EON)	Atefeh Bagherzadeh	Supervisor	Sept. 2024	Tabriz University of Technology	-
60	M.Sc of Computer Networks	Novel Methods for Fragmentation Management in Elastic Optical Networks	Ziba Jafari	Supervisor	Sept. 2024	Tabriz University of Technology	-
61	M.Sc of Computer Networks	New Defragmentation Methods in SDM-EON	Saber Farshi	Supervisor	June 2025	Tabriz University of Technology	-
62	M.Sc of Computer Networks	Reducing Resource Consumption and Connection Blocking in Multicast Routing in Elastic Optical Networks	Vahid Azizadeh	Supervisor	Sept. 2025	Tabriz University of Technology	-
63	Ph.D. of Communications	Multicast Routing, Spectrum and Modulation-Level Assignment in Elastic Optical Networks	Sara Sarraf	Supervisor	Sept. 2025	Tabriz University of Technology	-
64	M.Sc of Computer Networks	Optimization of Spectrum Allocation and Fragmentation Management for Multicast Traffic in Elastic Optical Networks (EON)	Hojatollah Yavari	Supervisor	Oct.2025	Tabriz University of Technology	-
65	M.Sc of Computer Networks	A Novel Technique of Routing for Multicast Traffic in Elastic Optical Networks	Zahra Zare	Supervisor	May 2026	Tabriz University of Technology	-

66	M.Sc of Computer Networks	New approach for spectrum assignment in multiband elastic optical network	Yousef Asghari	Supervisor	July 2026	Tabriz University of Technology	-
67	Ph.D. of Computer	Optimization of Resource Allocation in Elastic Optical Networks for Efficient Multicast Traffic Management	Sajjad Zare	Second Supervisor	Aug. 2026	Tehran University	-
68	Ph.D. of Computer	Routing and Resource Allocation for Multicast Traffic in Elastic Optical Networks	Leila Asadzadeh	Second Supervisor	Sept. 2026	Tehran University	-

Practical Experiences

- [6] Vice Chancellor of Electrical Engineering Department at Sahand University of Tech. since June 2007.
- [5] Head of ICT office at Sahand University of Technology from 1995 to 2002.
- [4] Network manager at Sahand University of Technology (from 1999 to 2001).
- [3] Design and programming a software to store Iranian laws and all their features. This software provides the capability of searching for laws through a number of ways.
- [2] Design and programming four different softwares for administrative affairs (Budget, Wages, Organization, and Investigation) at Sahand University of Technology.
- [1] Design and programming a software with different capabilities to provide a hand-woven carpet plan. This software is also used to guide a person to weave a carpet by telling the number and the color of warps and wefts in a carpet plan.