



CURRICULUM VITAE

Seyyed Fariborz Mousavi Madani

September 2022

EDUCATION

- | | |
|-------------|--|
| 1994 - 1999 | TOKYO UNIVERSITY, Ph.D.

Major: Optical Communication Engineering
Thesis: Study of dispersion management techniques in high-capacity long-distance wavelength-division-multiplexed optical transmission systems.
Advisor: Kazuro Kikuchi |
| 1988 - 1991 | SHARIF UNIVERSITY OF TECHNOLOGY, M. Sc.

Major: Telecommunication Engineering
Thesis: Design and implementation of 41 Mb/s optical receiver module for 34 Mb/s optical line terminal unit.
Advisor: Dr. Tebyani |
| 1983 - 1987 | SHIRAZ UNIVERSITY, B. Sc.

Major: Electronics Engineering |

ACADEMIC EMPLOYMENT

- | | |
|---------------------|---|
| Feb 2019 - Present | Deputy of Executive Affairs , Faculty of Engineering, Alzahra University |
| May 2002 - Present | Assistant Professor , Faculty of Engineering, Alzahra University |
| Sep 2009 - Sep 2010 | Visiting Research Assistant , Kish University
Part of a joint program with Monash University in Australia |

HONORS AND AWARDS

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|------------------------|--|
| 2005,2006 | Distinct Researcher
Awarded as the distinct researcher of the year in Alzahra University |
| 2005,2007
2008,2009 | Distinct Researcher
Awarded as the distinct researcher of the year in the faculty of engineering in Alzahra University |

2012 **Outstanding Service**
 Awarded for distinguished service as head of Faculty of Engineering in Alzahra University from 2009 to 2012

PROFESSIONAL AFFILIATIONS AND SERVICES _____

Head of

Faculty of Engineering in Alzahra university	2009 - 2012
Department of Information Technology	2002 - 2009

Professional Organization Member

Department of optical communication (Iran Telecommunication Research Center)
 Committee of electronic education (Alzahra University)

Executive Role in

Implementing the justifying proposal regarding the attraction of funds for the sake of faculty's renovation,	2010
 Renovating and upgrading the Workshops, Faculty of Engineering, Alzahra University	2010
Designing and upgrading the Bachelors' Computer Workshop,	2010
Faculty of Engineering, Alzahra University	
Designing and upgrading the Masters' Computer Workshop,	2010
Faculty of Engineering, Alzahra University	
Designing and upgrading the Computer Hardware Labs,	2010
Faculty of Engineering, Alzahra University	
Designing the Multi-functional Conference Hall,	2010
Faculty of Engineering, Alzahra University	
Renovating and upgrading the "Fundamentals of Electronics" Lab,	2010
Faculty of Engineering, Alzahra University	
Renovating and organizing educational and administrative spaces, Including the library,	2009 - 2011
Faculty of Engineering, Alzahra University	
 Holding the 16 th international conference of Industrial Engineering, (Allocating space and facilities of the secretary office) Faculty of Engineering, Alzahra University	2020
 Devising the Curriculum of Information Technology Engineering For the first time in Iran	2011
 Devising the comprehensive plan for Optical Communication Research Iran Telecommunication Research Center	2006 – 2007

Referee of

- Expert Recommender System of referees for research plans**
Fund Inventory for researchers of Iran, University of Tehran 2012
- Principles of Design, Optimization and Evaluation
of Optical Transmission networks**
Iran Telecommunication Research Center 2011 – 2012
- Submitted Papers for 13th Electrical Engineering Conference of Iran**
University of Zanjan 2010
- Six Submitted Papers for 13th Optics and Photonic Conference of Iran**
Iran Telecommunication Research Center 2011
- Nine Submitted Papers for 16th Electrical Engineering Conference of Iran**
Tarbiat Modarres University 2013

PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES AND INVITED BOOK CHAPTERS

Fariborz Moosavi Madani, "Fundamentals and Application of Fuzzy Theory"

Fariborz Moosavi Madani and Setareh Behzadi Pishkenari, "Application of Fuzzy Theory Principles in Industrial Engineering"

F. M. Madani, "A Novel Adaptive Router Placement Scheme in Hybrid Wireless Optical Access Network," *International Journal of Information & Communication Technology Research (IJICTR) - Special Issue on New Trends in Computer Networks*, vol. 8, pp. 1-8, Winter 2016.

F. M. Madani, "Scalable Framework for Translucent Elastic Optical Network Planning," *Journal of Lightwave Technology*, vol. 34, pp. 1086-1097, 2016.

F. M. Madani, "Energy Efficient Design Strategies of Translucent and Transparent IP Over WDM Networks," *International Journal of Information & Communication Technology Research (IJICTR)*, vol. 7, pp. 21-27, Winter 2015

F. Mousavi Madani, "Double Queue Scheduler for Differentiated Setup Delay Virtual Optical Network Embedding over Elastic Optical Network," *The Modares Journal of Electrical Engineering*, vol. 13, pp. 43-53, 2013.

F. Mousavi Madani, N. Dastranj Mamaghani, and A. Sharifi, "Conceptual Model of Information Technology Architecture for Service-Based Enterprises," *Journal of Information processing and Management*, vol. 27, pp. 662-687, 2012.

F. M. Madani, F. Saghafi, and M. Ghazimirsaeid, "Knowledge and Innovation Management Synthesized Model in Learning Organizations," *International Journal of Engineering & Industries*, vol. 2, 2011.

M. Nourouzi, F. Zandi, and F. Mousavi Madani, "Ranking The Methods of Applying Information Technology in Schools' Teaching-Learning Process," *Quarterly Journal of Educational Innovations*, vol. 7, pp. 9-34, Summer 2008.

F. Mousavi Madani, "Study on the attainable capacities of wavelength-division multiplexed optical transmission system based on dispersion-shifted fiber and non-zero dispersion fiber," *International Journal of Communication Engineering (IJCE)*, Vol. 1, No.1, Summer 2001, pp 3-13.

F. Mousavi Madani and K. Kikuchi, "Design theory of long-distance WDM dispersion-managed transmission system," *IEEE J Lightwave Technol.*, Vol. 17, No.8, Aug. 1999, pp 1326-1335.

F. Mousavi Madani and K. Kikuchi, "Performance limit of long-distance WDM dispersion-managed transmission system using higher order dispersion compensation fiber," *IEEE Photon. Technol. Lett.*, Vol. 11, No.5, May 1999, pp 608-610.

CONFERENCE PRESENTATIONS

TALKS

F. M. Madani and S. Mokhtari, "Virtual optical network embedding over elastic optical networks with set-up delay tolerance," in Electrical Engineering (ICEE), 2015 23rd Iranian Conference on, 2015, pp. 450-455.

F. M. Madani and S. Mokhtari, "Fragmentation-Aware Load-Balancing Virtual Optical Network Embedding (VONE) Over Elastic Optical Networks," CLOUD COMPUTING 2015, p. 42, 2015.

F. M. Madani, "Relative least impact dynamic lightpath provisioning algorithm for multi -fiber WDM network," in Telecommunications (IST), 2014 7th International Symposium on, 2014, pp. 771-776.

F. M. Madani, "An efficient segment-based defragmentation algorithm for dynamic lightpath reconfiguration in WDM networks," in Telecommunications (IST), 2014 7th International Symposium on, 2014, pp. 789-793.

F. M. Madani, "Optimized Design of Energy-Efficient IP over WDM Networks," in 3rd International Conference on Electric and Electronics, 2013.

F. M. Madani, Y. Cheryani, Z. Rafeemajd, and Z. Alipour, "Crisp and Fuzzy Reliability Analysis of Neyshaboor Train Accident," in Seventh Conference on Maintenance and Repair, 2011 (in Persian).

N. D. Mamaghani, **F. Mousavi**, F. Hakamizadeh, and M. Sadeghi, "Proposed combined framework of SOA and RUP," in Information Sciences and Interaction Sciences (ICIS), 3rd International Conference on, 2010, pp. 346-351.

M. Sadeghi, N. Dastranj, A. Sharifi, and **F. M. Madani**, "An Enterprise Interoperability Framework Using Shannon Entropy Concept," in 15th Annual Conference of Computer Society of Iran, 2010 (in Persian).

F. M. Madani, H. Younesian, "Proposing a Conceptual Model of Knowledge Management Process in Research and Development Organizations," in 2nd Iranian Knowledge Management Conference, 2010 (in Persian).

F. Zandi, **F. Mousavi Madani**, "The evaluation of IT investments based on fuzzy utility functions", in Proceedings of 3rd International Conference on Risk Management & Global e-Business, Korea, Aug. 10-12, 2009.

J. Mirzaei and **F. M. Madani**, "Proposing a Conceptual Readiness Assessment Model of MIS/IS Deployment in Manufacturing Companies (A Case Study Conducted on the Applications of the Suggested Model in MehrCamPars Co. 1)," in Information, Process, and Knowledge Management, (eKNOW'09), International Conference on, 2009, pp. 141-146.

F. Mousavi Madani, F. Zandi, S. Tarverdizadeh, "Service Oriented Approach for Enabling Agility in Enterprise Architecture", in IADIS 2009 International Conference Information Systems, Spain, Feb. 2009.

F. Mousavi Madani, "Proposing a Conceptual Model of Knowledge Management Process in Dynamic Virtual Organizations", in ICKM 2009 International Conference on Knowledge Management, Dubai, Jan. 28-30, 2009.

F. Mousavi Madani, H. Younesian, "Proposing a Conceptual Model of Knowledge Management Process Model in Research and Development Organizations", in International Conference on Innovations in Redefining Business Horizons (IIRB 2008), Ghaziabad, India, Dec. 2008.

F. Mousavi Madani, I. Bimar, "Proposing a Wireless PKI Model Optimized for M-Commerce Applications", in ISC Turkey Conference Proceedings, Turkey, Dec. 2008.

Mousavi Madani, A. Ghavamifar, "Knowledge Management Model in Dynamic Virtual Organization", in 6th International Management Conference, Dec. 2008.

S. Abbasi, V. Ghorbani, R. Ehsani, **F. M. Madani**, "Service Level Agreement and Value Adding Opportunities in Optical Networks," in Electrical Engineering (ICEE), 2008 16th Iranian Conference on, 2008, pp. 497-502 (in Persian).

S. Abbasi, H. Akhavan, R. Ehsani, **F. M. Madani**, "A Routing Algorithm for Shared Protection of Optical Transport Networks," in Electrical Engineering (ICEE), 2008 16th Iranian Conference on, 2008, pp. 503-508 (in Persian).

F. Zandi, **F. M. Madani**, M. Nourouzi, "Investigating the Best Information Technology Models for School Learning Process Using Decision Techniques," in 4th International Conference on ICT Management, 2008 (in Persian).

F. M. Madani, R. Samizadeh, S. Rezaeean, "The Role of e-CRM in Iranian Tourism," in National Conference of CRM, 2008 (in Persian).

F. Mousavi Madani, A. Ghavamifar and L. Beig, "Knowledge Management Model in Dynamic Virtual Organizations", in 6th International Management Conference, Iran, Tehran, Dec. 25-27, 2007.

F. Zandi, **F. M. Madani**, M. Nourouzi, "Comparing Fuzzy Group LINMAP with Group TOPSIS for Ranking Different Disciplines of ICT Applications in Schools," in First International Conference on Operations Research, 2007 (in Persian).

F. Mousavi Madani, A. Ghavamifar and L. Beig, "Proposing a Model for Knowledge Management Process in Organizations," in ISMOT'07 Conference Proceedings, China, June 2007.

F. Mousavi Madani, A. Ghavamifar and L. Beig, "The Comparison of Different E-Readiness Assessment Tools," in ibiz2007 Conference Proceedings, Malaysia, Feb. 2007.

F. Mousavi Madani and M. Memari, "A novel and optimized product recommendation method in e-commerce," in 5th International Symposium on Knowledge, Economy and Management, Turkey, Nov. 5-7, 2006.

F. Mousavi Madani and K. Kikuchi, "Feasibility of 1 Tb/s-10,000 km WDM dispersion-managed transmission system," in Proc. Optoelectron. and Comm. Conf. (OECC'98), Chiba, Japan, Jul. 12-16, 1998, paper 14A3-2.

F. Mousavi Madani and K. Kikuchi, "Design approach for ultra-long WDM dispersion managed transmission system," in Proc. Optoelectron. and Comm. Conf. (OECC'97), Seoul, Korea, Jul. 8-11, 1997, paper 10A3-4.

TEACHING EXPERIENCE

BACHELOR

Principles of Information Technology,	Alzahra University
Introduction to Internet and World-Wide Web,	Alzahra University
Research Methodology,	Alzahra University
Computer Programming,	Alzahra University
Computer Networks,	Alzahra University
User Interface Design,	Alzahra University
Numerical Analysis,	Alzahra University
Telecommunication Systems,	Alzahra University
Internet Engineering,	Alzahra University
Human-Computer Interaction,	Alzahra University
Engineering Mathematics,	Alzahra University
Signals and Systems,	Alzahra University
Mathematics (1&2),	Alzahra University
Digital Communication,	Kish University
Multi-variable Arithmetic,	Kish University

MASTER

Information Technology Management,	Alzahra University
Advanced Management Information Systems,	Alzahra University
Advanced Computer Networks,	Alzahra University
Fuzzy Logic and Artificial Intelligence,	Alzahra University
Fuzzy Logic for Engineering Applications,	Alzahra University
Application of Fuzzy Logic in Decision-making,	Alzahra University
Broadband Networks,	Alzahra University
Optical Networks,	Alzahra University
Advanced Topics in Information Technology,	Alzahra University
Advanced Topics in Information Technology,	Alzahra University
Knowledge Management,	Alzahra University
	Birjand University
Electronic Government,	Birjand University