

# CURRICULUM VITAE

MAHBOUBEH AFZALI

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## RESEARCH INTERESTS

- Logistics and transportation
- Sequencing and Scheduling
- Logistics and Supply Chain Planning
- Production and Operations Management
- Decision making under uncertainties
- Resource allocation in computer networks
- Fault tolerance in wireless networks
- fog computing and virtualization

## EDUCATION

**University of Technology Malaysia (UTM), Malaysia**  
**Faculty of Computer Science and Information Systems**  
**Department of Communication and Computer Systems**

**Ph.D.** in Computer Science  
2016

**GPA:** A

**Thesis:** Cross Layer Routing and Scheduling for Multi-Channel WiMAX Mesh Networks

**Islamic Azad University, Iran**  
**Faculty of Computer Engineering**

**M.Eng.** in Computer Engineering, Architecture of Computer Systems

**GPA:** 17.17/20

**Thesis:** Improving Availability of WiMAX Mesh Network with Emphasis on Connectivity

**Shahid Bahonar University of Kerman, Kerman, Iran**  
**Faculty of Computer Engineering**

**B.Eng.** in Computer Engineering, Hardware Engineering

**GPA:** 15.82/20

**Thesis:** Implementation of Forums Using ASP.Net and SQL Server 2000

## HONORS & AWARDS

- International Doctoral Fellowship (IDF), University Technology Malaysia, 2011-2012.
- International Doctoral Fellowship (IDF), University Technology Malaysia, 2012-2013.
- Best Paper in 4<sup>th</sup> International Conference on Environmental and Computer Science (ICECS), paper titled “*Ambient Air Temperature Forecasting Using Artificial Neural Network Approach*”, Singapore, 16-18 Sep 2011.
- Ranked 2<sup>nd</sup> among students in the B.Eng. degree of Computer Engineering, April 2004.

## PUBLICATIONS

- **Mahboubeh Afzali**, Kamalrulnizam Abu Bakar, Kayhan Zrar Ghafoor, Jaime Lloret, “*Improving the Communication Path Reliability of WiMAX Mesh Network using Multi Sponsor Node Technique*”, Telecommunication Systems (IF: 2.336), Vol. 60, PP. 133-141, January 2015.
- Afsaneh Afzali, M. Rashid, **Mahboubeh Afzali**, Vahid Younesi “*Prediction of Air Pollutants Concentrations from Multiple Sources Using AERMOD coupled with WRF Prognostic Model*”, Journal of Cleaner Production (IF:11.072), Vol. 66, PP. 1216-1225, 2017.
- **Mahboubeh Afzali**, Mahmood Fathy, Majid Harouni, Kamalrulnizam Abu Bakar, “*Fault Tolerance Analysis Among Subscriber Stations in the WiMAX Mesh Network (Text in Persian)*”, Journal of Intelligent Procedures in Electrical Technology, Vol. 8, PP:25- 33, March 2011.
- **Mahboubeh Afzali**, Kamalrulnizam Abu Bakar, Jaime Lloret, “*Adaptive Resource Allocation for WiMAX Technology*”, Wireless Personal Communications (IF:2.017),2019
- Majid Harouni, Dzulkifli Mohamad, Mohd Shafry Mohd Rahim, Sami M. Halawanic, **Mahboubeh Afzali**, “*Handwritten Arabic Characters Recognition based on Minimal Geometric*”, International Journal of Machine Learning and Computing, Scopus, Vol. 2, No. 5, PP. 578-582, October 2012.
- **Mahboubeh Afzali**, “*An Efficient Hybrid Decision-making Model for Sustainable Supplier Selection (Case Study: Parts Supply Industry)*”, Environmental Energy and Economic Research (EEER), 2021.
- **Mahboubeh Afzali**, Hamid Pourmohammadi, Amin Mohammad Vali Samani, “*An efficient framework for Trust Evaluation of Secure Service Selection in Fog Edge Computing based on QoS, Reputation and Social Criteria*”, Computing Journal (IF:2.42), 2022.
- **Mahboubeh Afzali**, Afsaneh Afzali, Hamid Pourmohammadi, “*An Interval-Valued Intuitionistic Fuzzy-based CODAS for sustainable supplier selection*”, Soft Computing Journal (IF:3.732), 2022.
- **Mahboubeh Afzali**, “*Evaluation of business-to-consumer e-commerce*”, 5<sup>th</sup> National Conference on Technology in Electrical and computer Engineering(tec2021), 2021.
- Hossein Ghaffarian, **Mahboubeh Afzali**, “*Investigation of Wireless Metropolitan Area Network Effort of Information and Communication Technology Development*”, 1st International Conference on (M4D) Mobile Communication Technology for Development, Karlstad, Sweden, December 2008.
- **Mahboubeh Afzali**, Hossein Ghaffarian, Mahmood Fathy, “*Maximum Use of Channel Bandwidth in Mesh WiMAX Network Using Concurrent Transmission*”, 13<sup>th</sup> Computer Society of Iran(Cisco) Iran, March 2007.(Persian).
- Amir Karamoozian, Abdelhakim Hafid, Mustapha Boushable, **Mahboubeh Afzali**, “*QoS-aware Resource Allocation for Mobile Media Services in Cloud Environment*”, The 13<sup>th</sup> Annual IEEE Consumer Communications and Networking Conference(CCNC), January 2016, Las Vegas, USA.
- **Mahboubeh Afzali**, Hossein Ghaffarian, “*Efficient Use of Channel Bandwidth Using Concurrent Transmission*”, 5<sup>th</sup> IEEE GCC Conference and Exhibition, Kuwait, March 2009.
- **Mahboubeh Afzali**, Majid Harouni, Vahid Khatib “*Connection Availability Analysis in the Wireless Mesh Network*”, 2nd International Conference on Computer and Automation Engineering (ICCAE 2010), Singapore, February 2010.
- Atefeh Taheri, **Mahboubeh Afzali**, Vahid Khatibi, “*A New Hybrid Intelligent Method for Diagnosing on Diabetes Mellitus*”, World Academy of Science, Engineering and Technology(WASET), Singapore, August 2010.
- **Mahboubeh Afzali**, Afsaneh Afzali, Gholamreza Zahedi, “*Ambient Air temperature Prediction Using Artificial Neural Network: A Case study of Kerman, Iran*”, 4<sup>th</sup> International Conference on Environmental and Computer Science, ICECS 2011.
- **Mahboubeh Afzali**, Kamalrulnizam Abu Bakar, “*New Approach for Channel Assignment in WiMAX Mesh Network*”, Pervasive Computing Research Group-Postgraduate Annual Research Seminar (PARS-2011), June 2011.

## RESEARCH EXPERIENCES

- Afsaneh Afzali, Mahboubeh Afzali, M. Rashid, B. Sabaria, “*Prediction of Ozone Concentration Based on Temperature in an Urban Area Using Artificial Neural Network Approach*”, ANNALS OF TROPICAL MEDICINE & PUBLIC, Scopus, Accepted.
- **Mahboubeh Afzali**, Hossein Ghaffarian, “*Enhancing Throughput of WiMAX Mesh Network through Scheduling Method*”, Islamic Azad University (Team Work).
- Atefeh Taheri, **Mahboubeh Afzali**, Vahid Khatibi, “*Development of New Predication Method for Diabetic Diagnosis based on PNN and SVM Classification Algorithms*”, Islamic Azad University (Team Work).
- **Mahboubeh Afzali**, Afsaneh Afzali, Mohammad Jamal Vali Samani, “*Real-time Temperature Prediction Using Heuristic Algorithm in Kerman City*”, Islamic Azad University (Team Work).
- Afsaneh Afzali, **Mahboubeh Afzali**, Mohammad Jamal Vali Samani, “*Prediction of Ozone Concentration Based on Ambient Temperature Using Artificial Neural Network (Case Study: Kerman City)*” University of Kashan (Team Work).
- Implementation of Finding Minimal CutSets in Fault Tree, (Team Work).

## REVIEWER of JOURNALS

- Journal Of Cleaner Productions, Elsevier
- Wireless Networks, Springer
- Wireless Personal Communications, Springer
- Transfer Journal
- Supercomputing Journal, Springer
- Mobile networks and Applications, Elsevier

## PROFESSIONAL EXPERIENCE

- Social Security Organization, Network Administrator
- Supervisor of Robotic team of Islamic Azad University in the Robotic Competition, Brojerd, Iran, February 2009.
- Supervisor of Sama Professional Technical team in the National Computer Skills Competition, Tabriz, Iran, June 2008.

## CERTIFICATES

- Cisco Network Associate, Iran.
  - ❖ **Standard Code:** 9201733928
  - ❖ **Date:** 2014/03/03 (Date of Issue of the first certificate)
- “*CCNP Switch*”, Technical Institute of Tehran, Iran.
  - ❖ **Standard Code:** 366938
  - ❖ **Date:** 2016/12/22 (Date of Issue of the first certificate)
- “*CCNP Route*”, Technical Institute of Tehran, Iran.
  - ❖ **Standard Code:** 366938
  - ❖ **Date:** 2017/02/12 (Date of Issue of the first certificate)
- “*Oracle Database: Administration Workshop I*”, Asre Danesh Afzar, Iran, 2016.
- “*Oracle Database: Administration Workshop II*”, Asre Danesh Afzar, Iran, 2016
- “*Configuring Windows 8.1*”, Technical Institute of Tehran, Iran, 2016.
- “*Windows Server 2000*”, Technical Institute of Tehran, Iran, 2016.
- “*Multimedia Information Technology*”, Information Technology Center, December 2001.
  - ❖ **Standard Code:** 80/0-84/21
  - ❖ **Date:** 2001/12/21 (Date of Issue of the first certificate)
- “*Computer Animation techniques: Motion Data management*” Certificate, Department of Computer Graphics and Multimedia, University Technology Malaysia, Oct 2010.
- “*Creating Weblog*” Certificate, Youth Research Club, Iran
- “*Wan Network*” Certificate, Tamin Tehran, Iran, October 2009.
- “*Introduction to Writing for Publication in English for Postgraduates*” Certificate, the

English Language Unit, Centre for Teaching and Learning, University Technology Malaysia, March 2010.

- “*How to Extract Relevant Information from Scientific Research?*” Certificate, Islamic Azad University- The 7 Zone, Iran
- “*Education and Training Skills 1,2 and 3*” Certificate, 120 hours, Islamic Azad University, Iran,
- “*Cloud Computing: Is it a HYPE or REAL?*” Seminar, University Technology Malaysia, Iskandar Malaysia”, June 2011.

## MEMBERSHIP SOCIETIES

- Member of Computer Society of Iran(CSI)
- Member of International Association of Computer Science and Information Technology (IACSIT)
- Member of Young Researcher Club, Iran

## LANGUAGES

- Persian (Mother Tongue)
- English ( IELTS:6.5)  
Reading: 7.5  
Writing: 6.5  
Speaking: 6.5  
Listening: 6

## TECHNICAL SKILLS

- **Programming Languages**
  - ❖ C++, C#.Net, Matlab, Java,
- **Cisco Network**
  - ❖ CCNA, CCNP Route, CCNP Switch
- **Web Development**
  - ❖ HTML, ASP, ASP.Net.
- **Database Systems**
  - ❖ SQLServer, MySql. Administration of Oracle Database,
- **Statistics Software**
  - ❖ SPSS
- **Decision Making**
  - ❖ EXPERT CHIOCE, Super Decision Making
- **Numerical Weather Prediction Models**
  - ❖ Weather Research & Forecasting (WRF)
- **Air Quality Models**
  - ❖ CAMx, AERMOD,

## REFEREES

- Associated Prof. Dr. Kamalrulnizam Abu Bakar [Email: knizam@utm.my]  
Faculty of Computer Science and Information Systems,  
University Technology Malaysia-81310 Johor Bahru- Malaysia
- Associated Prof. Jaime Lloret Mauri [Email: jlloret@dcom.upv.es]  
Department of Communications,  
Polytechnic University of Valencia  
Camino de Vera 46022, Valencia – Spain
- Associated Prof. Dr. Mahmood Fathy [Email: mahfathy@iust.ac.ir]  
Department of Computer Engineering,  
Iran University of Science and Technology , Tehran, Iran
- Assistant Prof. Maliheh Bahadori [Email: [m\\_bahadori@sbu.ac.ir](mailto:m_bahadori@sbu.ac.ir)]  
Department of Computer Engineering,  
Shahid Beheshti University, Tehran, Iran

