# **Curriculum Vitae**

## 1. Personal Data

| Name              | Mohammad S. Saraireh                                                                                                    |
|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| Date of Birth     | 1-12-1969                                                                                                               |
| Marital<br>Status | Married                                                                                                                 |
| Nationality       | Jordanian                                                                                                               |
| Address           | Mutah University Faculty of Engineering Computer Engineering Department B.O.Box (7) Mutah University 61710 Kerak Jordan |
| E-mail            | m_srayreh@mutah.edu.jo<br>srayreh_2000@yahoo.com                                                                        |
| Phone             | 00-962-779616171 (Mobile)<br>00-962-(3)2360330 (Home)<br>00-962-(3)2372380 / Ext. 4661 (Office)                         |

## 2. Education

| Degree | Field                            | Institution                 | Country | Year |
|--------|----------------------------------|-----------------------------|---------|------|
| Ph.D.  | Wireless<br>Networks             | Sheffield Hallam University | UK      | 2006 |
| MSc.   | Computer and Network Engineering | Sheffield Hallam University | UK      | 2003 |
| B.Sc.  | Electrical<br>Engineering        | Mu'tah University           | Jordan  | 1991 |

# 3. Research Projects

| Degree | Project Title                                                                            |
|--------|------------------------------------------------------------------------------------------|
| Ph.D.  | Medium Access Control Mechanisms for Quality of Service over Wireless Computer Networks. |

| M.Sc.  | Quality of Service Assessment for Multimedia Transmission over |  |  |  |
|--------|----------------------------------------------------------------|--|--|--|
| MI.SC. | Computer Networks.                                             |  |  |  |

### 4. Work Experience

| Period         | Work                                                                                                                                                          |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 2012 - Present | Assistant to the President for Administrative Affairs (Chairman of the Central Tenders Committee)                                                             |  |
| 2010-2013      | Director of the Maintenance and Perpetuity Unit                                                                                                               |  |
| 2007 - Present | Associate Professor at Computer Engineering Department / Faculty of Engineering / Mutah University                                                            |  |
| 2002-2006      | Research Fellow at Sheffield Hallam University / Part Time<br>Lecturer During PhD Research Period at Sheffield Hallam<br>University.                          |  |
| 1991-2002      | Telecommunication exchanges maintenance officer, computed networks administrator, Royal Signal Corps and Electronic Warfare Directorate, Jordan Armed Forces. |  |

## 5. Membership of Professional Bodies

| Date           |                              |        |
|----------------|------------------------------|--------|
| 1991 – Present | Jordan Engineers Association | Member |

#### 6. Publications Record

- 1. M. Saraireh, R. Saatchi, U. Shur, and R. Strachan. "Fuzzy Logic Based Evaluation of Quality of Service for MultimediaTransmission". In Proceeding of PREP 2004, EPSRC, University of Hertfordshire, Page(s): 13-14, 5-7 April 2004, United Kingdom.
- **2. M. Saraireh**, R. Saatchi, S. Alkhayatt and R. Strachan. " IEEE 802.11 MAC Protocol Quality of Service Performance Analysis". In Proceeding of PREP 2005, EPSRC, Lancaster University, Page(s): 171-172, 30<sup>th</sup> March 1st April 2005, United Kingdom.
- **3. M. Saraireh**, R. Saatchi, S. Alkhayatt and R. Strachan. "A Performance Comparison of IEEE 802.11 MAC Access Mechanisms for Different Traffic Types.", In the Proceeding of the 6th Annual Post Graduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, Liverpool Johm Moores University, Page(s): 313-318, ISBN: 1-902-56011-6, 27 & 28 June, 2005, United Kingdom.

- **4. M. Saraireh**, R. Saatchi, S. Alkhayatt and R. Strachan. "Impact of Varying the Minimum Value of Contention Window (CW*min*) of the IEEE 802.11 MAC Protocol on the QoS Parameters ", In Proceeding of 10th IFIP International Conference on Personal Wireless Communications PWC'05, Page(s): 219-226, ISBN: 1-86094-582-1, August 25-27, 2005, France.
- **5. M. Saraireh**, R. Saatchi, S. Alkhayatt and Rebecca Strachan. "A Comparative Study of IEEE 802.11 MAC Access Mechanisms for Different Traffic Types.". In Proceeding of ICETE, 2nd International Conference on E-business and Telecommunication Networks, Microsoft Convention Centre at Reading, vol. 2, Page(s): 28-35, ISBN:972-8865- 32-5, October 3-7, 2005, United Kingdom.
- **6. M. Saraireh**, R. Saatchi, S. Al-khayatt and R. Strachan, "A Comparative Study OF IEEE 802.11 MAC Access Mechanisms for Different Traffic Types", 2nd International Conference on E-business and Telecommunication Networks ICETE 2005 Best paper, **A book published by Springer with ICETE 2005 best papers**, 2005, United Kingdom.
- **7. M. Saraireh**, R. Saatchi, S. Al-khayatt and R. Strachan, "Development and Evaluation of a Fuzzy Inference Engine System to Incorporate Quality of Service in IEEE 802.11 Medium Access Protocol", IEEE International Conference on Wireless and Mobile Communications ICWMC'06, Page(s): 29-34, ISBN: 0-7695-2629-2, July 29-31, 2006, Romania.
- **8. M. Saraireh**, R. Saatchi, S. Al-khayatt, R. Strachan, and Z. Abo- Hammour, "Optimisation of IEEE 802.11 MAC Protocol Parameters Using a Hybrid Genetic-Fuzzy Approach", Proceedings of the IEEE Systems, Man and Cybernetics Society United Kingdom & Republic of Ireland Chapter 5th Conference on Advances in Cybernetic Systems AIC2006, Sheffield Hallam University, Page(s): 253-258, ISSN 1744- 9170, September 7-8, 2006, United Kingdom (**Best Paper prize**).
- **9. M. Saraireh**, R. Saatchi, S. Al-khayatt and R. Strachan, "Assessment and improvement of quality of service in wireless networks using fuzzy and hybrid genetic-fuzzy approaches "Artificial Intelligence Review Journal, Volume 27, Issue 2-3, Page(s): 95 111, ISSN:0269-2821, 2007
- **10.** Yazeed Alsbou, Reza Saatchi, Samir Al-Khayatt, Rebecca Strachan, and **Mohammad Saraireh** "A Novel Quality of Service Assessment of Multimedia Traffic over Wireless Ad Hoc Networks", in IEEE FMN '08, UK, 2008.
- **11**. Za'er S. Abo-Hammour, Othman M-K. Alsmadi, **Mohammad S. Sarayreh**, Husam J. Khasawneh, "Genetic-Algorithm-Based Adaptive Tuning Method of PID Controllers", International Symposium on INnovations in Intelligent SysTems and Applications, June 29-July 1, TURKEY, 2009.
- **12**. Othman M-K. Alsmadi, Za'er S. Abo-Hammour, **Mohammad S. Sarayreh**. "Dimensionality Reduction of Multi-Time Scale Systems Via Eigenvalue Decoupling and State Transformation", International Symposium on INnovations

- in Intelligent SysTems and Applications, June 29-July 1, TURKEY, 2009.
- **13**. Za'er Salim Abo-Hammour, **Mohammad Suleiman Saraireh** and Othman M-K. Alsmadi, "A comparative Study Between Conventional and Continuous Genetic Algorithms for the Solution of Cartesian Path Generation Problems of Robot Manipulators". In the proceeding of 6<sup>th</sup> International Conference of Informatics in Control, Automation and Robotics ICINCO-ICSO 2009, Italy, 2009.
- **14**. Othman M-K. Alsmadi, Za'er S. Abo-Hammour, **Mohammad S. Saraireh**, "Model-order Reduction of Singularly Perturbed Systems based on Artificial Neural Estimation and LMI-based Transformation". In the proceeding of 6<sup>th</sup> International Conference of Informatics in Control, Automation and Robotics ICINCO-ICSO 2009, Page(s): 173-180, Italy, 2009.
- **15**. **Mohammad S. Saraireh** " The use of Continuous Genetic Algorithm as a Novel Numerical Solver for Two-Point Boundary Value Problems", Mu'tah Lil Buhuth wad-Dirasat, Vol.25. No.1, 2010
- **16**. Nidal Aabid Al-Dmour, **Mohammad Suleiman Saraireh**, "ParCop with New Capabilities and Efficient Scheduling Policies", Leonardo Journal of Sciences, Volume 10, Issue 18, Page(s): 11-26, 2011.
- **17**. **Mohammad S. Saraireh**, "Performance Evaluation of Search Algorithms over Peer-to-Peer Networks", European Journal of Scientific Research, European Journal of Scientific Research ISSN 1450-216X Vol.55 No.2, pp.232-236, (2011).
- **18**. Za'er S. Abo-Hammour, Othman M.K. Alsmadi, Adnan M. Al-Smadi, Maha I. Zaqoutc and **Mohammad S. Saraireh** "ARMA model order and parameter estimation using genetic Algorithms" Mathematical and Computer Modelling of Dynamical Systems Journal Taylor & Francis i*First*, 1–21, 2011
- **19**. Othman MK Alsmadi, Zaer S Abo-Hammour, Adnan M Al-Smadi and **Mohammad S Saraireh** " A robust and efficient genetic algorithm for solving a chemical reactor problem: theory, application and convergence analysis" Transactions of the Institute of Measurement and Control, Published by SAGE, 2011
- **20**. Zaer S. Abo-hammour, Ramzi B. Albadarneh, and **Mohammad S. Saraireh** "Solution of Laplace equation using continuous genetic algorithms" Kuwait Journal of Science and Engineering, Published by Academic Publication Council-Kuwait University, 2011
- **21**. Ja'afer M. AL-Saraireh, **Mohammad S. Saraireh**, Saleh S. Saraireh, Mohammad M. AL Nabhan, "Formal Analysis of A Novel Mutual Authentication and Key Agreement Protocol" Journal of Computer Science and Technology, 2011
- **22**. Saleh Saraireh, **Mohammad Saraireh** & Yazeed Alsbou "Secure Image Encryption Using Filter Bank and Addition Modulo 2<sup>8</sup> with Exclusive OR Combination" International Journal of Computer Science and Security (IJCSS), Volume (7): Issue (2): 2013

## 7. Research Interest

Computer Networks and Distributed Systems, Network Security, Modeling and Simulation, Wireless Networks, Genetic Algorithms, Artificial Intelligence, Multimedia Technology, and Robotics.

### 8. Teaching

- Computer Networks
- Wireless Networks
- Internetworking protocols
- Computer Organization and Design
- Computer Workshop and Maintenance
- Signals and systems
- Introduction to Logic design
- Distributed Systems
- Network and computer security
- Computer Operating Systems
- Electronics
- Multimedia Systems
- Artificial Intelligence
- Genetics Programming

## 9. Languages

- 1. Arabic (Mother tongue).
- 2. English (Fluent).
- 3. French (Beginner).

#### 10. References

| Name                   | Position               | E-mail                |
|------------------------|------------------------|-----------------------|
| Prof. Qublan Al-Majali | Vice President for     | majali54@mutah.edu.jo |
|                        | Administrative Affairs |                       |
| Prof. Omer Al-Maitah   | Dean of the Faculty of | abponkm@mutah.edu.jo  |
|                        | Engineering            |                       |
| Prof. Khaled Khlefat   | Dean of the Faculty of | alkhkha@mutah.edu.jo  |
|                        | Science                |                       |