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**KING SAUD UNIVERSITY**

**College of Computer and Information Sciences**

**Department of Information Technology**

**Faculty Member Resume**

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| **Full name** | **Highest degree** | **Academic rank** |
| **Hala Mohamed Mokhtar** | **PhD** | **Associate Professor** |

* **Degrees with fields, institution, and date**:
* Nov. 99 - Mar. 03 : Ph.D. in Computer Science, Liverpool John Moores University, UK
* **Sep. 99 – Dec. 99 : PGCert in Software Tech., Liverpool University, UK**

Grade A.

* **1992 - 1996: M.Sc. in Computer Engineering, Assiut University, Egypt**
* **1985 - 1990: B.Sc. in Electrical Eng. (Communication), Assiut Univ., Egypt**
* **Years of service (including date of original appointment and dates of promotion)**:
* **Oct 2010 - :** Associate professor in Computing, King Saud University, Riyadh, SA
* **Aug 2002 – Sep 2010:** L/SL in Computing, School of Computing and Mathematical Sciences, Liverpool John Moores University, UK
* **2001 – 2002**: Instructor in Mathematics & Computing, School of Computing and Mathematical Sciences, Liverpool John Moores University (Part-time).
* **Other related experience (teaching, industrial, etc.)**:

**Training & Workshops**

* Statistical Analysis & SPSS, Liverpool John Moores University
* Microsoft Project 2007, Liverpool John Moores University
* .NET framework & C# programming, Liverpool John Moores University
* EPSRC Early Career Workshop in Information Communication Technology (ICT), Warwick 13-14 Nov. 2008
* Research Bid training – Bid Writing Workshop
* Teaching in large groups, Liverpool John Moores University
* Applying & Managing research Grants, Liverpool John Moores University
* Intellectual Property (IP) Workshop, Liverpool John Moores University
* Diversity in the work place course, Liverpool John Moores University

**Funded Projects**

* Hala Mokhtar (PI), “A Monitoring and Controlling Framework for Wireless Sensor/Actor Networks”, £128k (Jan. 2006 – Dec. 2008) Engineering and Physical Sciences Research Council (EPSRC)
* Hala Mokhtar (PI), “Integration of Wireless Sensor Networks & the Internet,” LJMU Faculty Bid, July 2007
* Hala Mokhtar (PI), “Investigation of Cross-Layer Design for Wireless Sensor Networks,” LJMU University Research Fund, June 2006
* **Principal publications (last five years)**:

**Book Chapters**

M. Yu, H. Mokhtar, and M. Merabti, “Autonomic Networking in Wireless Sensor Networks,” Book Chapter on "Autonomic Computing and Networking", Springer, USA, 2009.

**Journal Papers**

1. M. Asim, H. Mokhtar, and M. Merabti, "A self-managing fault management mechanism for wireless sensor networks” International Journal of Wireless & Mobile Networks (IJWMN) Vol. 2, No. 4, Nov 2010
2. M. Yu, H. Mokhtar, and M. Merabti, “A Self-Organized Middleware Architecture for Wireless Sensor Network Management," International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Special Issue on: “System Aspects of Wireless Networks", Vol. 3, No. 3, 2008.
3. M. Yu, H. Mokhtar, and M. Merabti, “Fault Management in Wireless Sensor Networks,” IEEE Wireless Communications, special issue on Wireless Sensor Networks, Vol. 14, No. 6, Dec. 2007

**Conference Papers**

1. I. Khan, H. Mokhtar, M. Merabti, “ A new self-detection scheme for wireless sensor networks boundary recognition” The 34th IEEE Conference on Local Computer Networks, LCN’09, Zürich, Switzerland, Oct. 2009.
2. Ian Rhead, Madjid Merabti, Hala, Mokhtar, **Paul Fergus,** Amjad Shaheed, A Hierarchically Stuctured Worldwide Sensor Web Incorporating IEEE 1451, The 10th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, 22nd - 23rd June, Liverpool, UK, 2009.
3. M. Asim, H. Mokhtar, and M. Merabti, "A cellular approach to fault detection and recovery in wireless sensor networks," The Third International Conference on Sensor Technologies and Applications, SENSORCOMM 2009, Athens/Vouliagmeni, Greece June 2009
4. Ian Rhead, Madjid Merabti, Hala Mokhtar, **Paul Fergus**, “A Hierarchically Structured Worldwide Sensor Web Architecture,” IEEE Consumer Communication and Networking Conference CCNC 2009 Short Papers, Las Vegas, Nevada, USA, 10th - 13th January, 2009.
5. Ian Rhead, Madjid Merabti, Hala Mokhtar, **Paul Fergus**, “A Hierarchically Structured Architecture for a Worldwide Sensor Web,”23st IEEE International Conference on Advanced Information Networking and Applications (AINA): Workshop on Telecommunication Networking, Applications and Systems (TeNAS), Bradford, UK, 2009.
6. M. Yu, H. Mokhtar, and M. Merabti "Self-Managed Fault Management in Wireless Sensor Networks", The Second International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, UBICOMM 2008, Valencia, Spain, Sep. 2008.
7. M. Asim, H. Mokhtar, and M. Merabti, “A Fault Management Architecture for Wireless Sensor Networks,” International [**Wireless Communications and Mobile Computing Conference, IWCMC '08, Crete Island, Greece,**](http://ieeexplore.ieee.org/xpl/RecentCon.jsp?punumber=4599898) Aug. 2008.
8. M. Asim, H. Mokhtar, and M. Merabti, “Cellular Self-Organization Architecture for Wireless Sensor Networks,” The 9th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2008
9. K. Ijaz, H. Mokhtar. And M. Merabti, “A Survey of Boundary Detection Algorithms for Sensor Networks,” The 9th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2008
10. Ian Rhead, Madjid Merabti, Hala Mokhtar, **Paul Fergus**, “Worldwide Sensor Web Framework Overview,” The 9th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2008.
11. M. Yu, H. Mokhtar, and M. Merabti, “A Biologically Inspired Fault Management Architecture for Self-Managing Wireless Sensor Networks,” Fourth EuroFGI Workshop on Wireless and Mobility, Barcelona, Spain, Jan. 2008.
12. [Shih-Hao Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), Madjid Merabti, [Hala M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html), "Fault Tolerance Magnetic Coordinate Routing for Mobile Sinks Wireless Sensor Networks (FTMC)" the IASTED International Conference on Communication Systems, Networks and Applications (CSNA 2007), Beijing, China, Oct. 2007.
13. F. Bouhafs, M. Merabti, and H. Mokhtar, “A Node Recovery Scheme for Data Dissemination in Wireless Sensor Networks” IEEE International Conference on Communications ICC’07, Glasgow, Uk, June 2007.
14. [Shih-Hao Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), Madjid Merabti, [Hala M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html), “Spider-Net Zone Routing Protocol for Mobile Sink Wireless Sensor Networks”, The International Conference on Wireless Networks (ICWN'07) Monte Carlo Resort, Las Vegas, Nevada, USA, June 2007.
15. M. Yu, H. Mokhtar, and M. Merabti, ”A Survey of Fault Management in Wireless Sensor Networks”, The 8th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2007.
16. [Shih-Hao Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), Madjid Merabti, [Hala M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html), “Regional Radiation Topology Algorithm for Mobile Sinks in Wireless Sensor Networks”, The 8th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2007.
17. F. Bouhafs, M. Merabti, and H. Mokhtar, “Mobile Event Monitoring Protocol for Wireless Sensor Networks”, International Workshop on Telecommunication Networking, Applications and Systems (TeNAS’2007), Niagara Falls, Canada, May 2007.
18. [Shih-Hao Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), Madjid Merabti, [Hala M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html): “Coordinate Magnetic Routing for Mobile Sinks Wireless Sensor Networks”, International Workshop on Telecommunication Networking, Applications and Systems (TeNAS’2007), Niagara Falls, Canada, May 2007.
19. F. Bouhafs, M. Merabti, and H. Mokhtar, “A Coordination Framework for Wireless Sensor and Actor Networks”, The International Conference on Late Advances in Networks ICLAN’06, Paris, France, December 2006
20. [Shih-Hao Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), Madjid Merabti, [Hala M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html) “MBRP: Magnetic-Based Routing Protocol for Mobile Sinks Wireless Sensor Networks”, Networks: Computation, Communication and Applications (NCCA'06) PhD Student Workshop, University of Oxford, UK, June 2006.
21. F. Bouhafs, M. Merabti, and H. Mokhtar: 'A Coordination Protocol for Wireless Sensor and Actor Networks,' The 7th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2006.
22. M. Yu, H. Mokhtar, and M. Merabti, ”A Survey of Network Management Architecture in Wireless Sensor Network”, The 7th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2006.
23. [S. Chang](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/c/Chang:Shih=Hao.html), M. Merabti, [H. M. Mokhtar](http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/m/Mokhtar:Hala_M=.html), “[MBRP: Magnetic-Based Routing Protocol for Mobile Sinks Wireless Sensor Networks](http://www.cms.livjm.ac.uk/pgnet2006/Programme/Papers/2006-083.pdf) “,The 7th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2006
24. S. Indrasinghe, R. Pereira, H. Mokhtar, “[Hosts Address Auto Configuration for Mobile Ad Hoc Networks](http://www.comp.brad.ac.uk/het-net/tutorials/P14.pdf)” Performance Modelling and Evaluation Of Heterogeneous Networks Conference HET-NETs'06, Ilkley, West Yorkshire. UK, 2006.
25. F. Bouhafs, M. Merabti, and H. Mokhtar, “A semantic Clustering Routing Protocol for Wireless Sensor Networks”, IEEE Consumer Communications and Networking Conference CCNC’06, Las Vegas, NV, USA, 8-10 January 2006.
26. F. Bouhafs, M. Merabti, and H. Mokhtar: 'A Semantic Clustering Scheme for Wireless Sensor Networks,' The 6th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2005.
27. S.-H. Chang, M. Merabti, and H. Mokhtar: 'EQEN - Efficient Quality of Service Framework for Mobile Sinks Wireless Sensor Networks,' The 6th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2005.
28. M. Karim, R. Pereira, and H. Mokhtar: 'A Survey on Quality of Service in Wireless Networks Environments,' The 6th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, , Liverpool, UK, June 2005.
29. R. Pereira and H. Mokhtar: 'A Packetized Round Robin Service Discipline for IP Audio Streams in MPLS DiffServ Networks,' Third Performance Modelling And Evaluation Of Heterogeneous Networks Conference HET-NETs'05, Ilkley, West Yorkshire. UK, 2005.

* **Institutional and professional services (last five years)**:
* **Technical Program Committees**

IEEE International Conference on Communications (ICC’09) - AHSN

IEEE Conference on Local Computer Networks (LCN 2009)

IEEE International Conference on Scalable Computing & Communications (ScalCom’09)

IEEE International Conference on Computation, Science & Engineering (CSE’09)

IEEE Global Communications Conference (GLOBECOM ’10)

IEEE International Conference on Communications (ICC’10) - AHS

IEEE Conference on Local Computer Networks (LCN 2010)

IEEE International Conference on Scalable Computing & Communications (ScalCom’10)

* **Organizing Committes**

Post-Graduate Symposium on the Convergence of Telecommunications, Networking & Broadcasting (2004 - 2009).