

Résumé

MOHAMMAD SHAKEEL LAGHARI

Associate Professor, Department of Electrical Engineering
United Arab Emirates University
P.O. Box 15551, Al-Ain, U.A.E.

Office Tel: (9713) 7135142, Mobile: (97150) 6625492

E-mail: mslaghari@uaeu.ac.ae

PROFESSIONAL OBJECTIVES:

Searching problems and finding optimum solutions existing in the field of Computer Science and Engineering with emphasis in Applied Artificial Intelligence, Software Engineering, and Transputer* Networks.

EDUCATION:

- B.E. (1980): Electronic Engineering**
Mehran University of Engineering and Technology, Jamshoro, Pakistan.
Thesis: "Digital Capacitance Meter".
- M.S. (1983): Electrical Engineering**
Drexel University, Philadelphia, Pennsylvania, U.S.A.
Research: "3-credit of research work in Computer Aided Networks".
- Ph.D. (1993): Computer Engineering**
University of Wales, Swansea, U.K.
Thesis: "Processor Scheduling for Transputer Networks".

PREVIOUS FACULTY POSITIONS:

- 09/1999 – 08/2000 Assistant Professor,**
Department of Computer Science,
College of Computer and Information Sciences,
King Saud University, Kingdom of Saudi Arabia.
- 09/1993 - 08/1999 Assistant Professor,**
Computer Engineering Department,
College of Engineering & Petroleum, Kuwait University, Kuwait.
- 02/1981 - 09/1986 Lecturer,**
Department of Computer Systems Engineering, Mehran University of
Engineering and Technology, Jamshoro, Pakistan.

GRADUATE RESEARCH:

- 10/86 - 03/91 Postgraduate student,** Department of Electrical and Electronic Engineering,
University of Wales, Swansea, U.K.

Coding and optimization of parallel algorithms for Cellular Automaton applications on Multi-computers.

Coding and optimization of parallel algorithms for Computer Vision & Image processing applications on Multi-computers.

Coding and optimization of parallel algorithms for Tribological applications on Multi-computers.

Developed several Static, Dynamic, and Hybrid techniques of processor scheduling by using the Algorithmic, Geometric, and Processor Farming paradigms of parallel processing.

Involved with teaching undergraduates the C programming language and digital system design.

PREVIOUS RESEARCH EMPLOYMENTS:

1/3/91 - 31/8/91 Full time paid researcher,
College of Engineering, University of Wales, Swansea, U.K.

Worked on a MoD (Ministry of Defense, U.K.) sponsored software engineering project of "Wear Particle Analysis using computer vision", carried out in collaboration with the Departments of Computer Science, Electrical & Electronic Engineering, Mechanical Engineering, and the Tribology Center, Swansea, U.K. The project investigated the analysis of microscopic particles generated by wear mechanisms by using computer vision and image processing techniques.

The aim of the project was to develop a fully automated software and hardware system to classify wear particles and thereby predict wear failure modes in aircraft engines and other machinery, such that it obviates the need for specialists and reliance on human visual inspection techniques.

The goal is to provide quantitative information about the shape, size and other relevant characteristics of wear debris, which are carried by a lubricant in an oil-wetted system, usually from aircraft and helicopter engines.

Designed and implemented a computer oriented image-processing hardware for the project and developed a control system package **CAVE** (Computer Aided Vision Engineering) for the image analyzer. CAVE is a multiple window, hierarchical graphics interface that allows the user to interact with the system.

1/9/91 - 31/10/91 Full time paid researcher,
College of Engineering, University of Wales, Swansea, U.K.

Worked on a SERC, DTI, Rockwell Printing Machine Company of Peterborough, and Jarrold Printing of Norwich - jointly financed project known as "**Rainbow**". The project was to improve the speed and efficiency of the printing process for producing color magazines and books. The work is expected to bring radical improvements in productivity and reduction in waste for the U.K. Printing Industry.

My share of the project was to design and implement a PC oriented image-processing hardware and develop software in the form of an image analysis system that would enable printing machines to run faster and produce a more consistent quality of print.

1/11/91 - 31/8/93 Full time paid researcher,
College of Engineering, University of Wales, Swansea, U.K.

Continuation of the Wear Particle Analysis project this time sponsored by DRA (Defense Research Agency, U.K.). In this phase of the project, the CAVE package was investigated for the automation of the system. Parallel computer architecture was designed with 10 processors to speedup the system. Contracted work for the analysis of wear debris using the developed computer vision system for the companies: MJA Dynamics Limited of Southampton and Rolls Royce Limited of Bristol, U.K.

REVIEWER FOR TECHNICAL JOURNALS:

- Computers & Electrical Engineering (Elsevier Science)
- Emirates Journal for Engineering Research (UAE)
- International Journal of Computers and their Applications

LIST OF COURSES TAUGHT AT UAE UNIVERSITY:

- GENG 200, Introduction to Programming
- GENG 230, Fundamentals of Engineering 1B
- ELEC 350, Computer Algorithms and Programming
- ELEC 330, Computer Programming
- ELEC 3522/335, Digital Logic Design
- ELEC 345, Digital Logic Design Lab
- ELEC 355, Software Engineering
- ELEC 450, Computer Organization
- ELEC 452, Business Telecommunications & Networks
- ELEC 453/451, Microprocessors
- ELEC 550, Operating Systems
- ELEC 551, Digital Image Processing
- ELEC 559, Special Topics in Computer Engineering
- ELEC 561, JAVA Programming Applications
- ELEC 603, Project Management Techniques of Electrical Engineers (graduate course)
- ELEC 649, Advanced Topics in Computer Engineering (graduate course)
- ITBP 209, Digital Hardware Fundamentals (IT College)

PUBLICATIONS:

Chapter in Book

1. M.S. Laghari & F. Deravi, “*Comparison of Scheduling Techniques for the Parallel Implementation of the Hough Transform*”, chapter in "Algorithms and Parallel VLSI Architectures II", Patrice Quinton and Yves Robert (Editor), Elsevier Science Ltd. (Hardcover), ISBN: 0444891536, Copyright 1992, pp. 377-382.
2. M.S. Laghari, “*Surface Features Recognition of wear Debris*”, chapter in “AI 2002: Advances in Artificial Intelligence - Lecture Notes in Computer Science (LNCS 2557)”, Springer Berlin / Heidelberg, ISBN: 978-3-540-00197-3, Copyright 2002, pp. 627-637.

Papers in Refereed Journals

3. B.J. Roylance, I.A. Albidewi, M.S. Laghari, A.R. Luxmoore, & F. Deravi, “*Computer Aided Vision Engineering (CAVE) - Quantification of Wear Particle Morphology*”, Journal of the Society of Tribologists & Lubrication Engineers (STLE), Vol 50, No. 2, 1994.
4. M.S. Laghari & A. Boujarwah, “*Wear Particle Texture Classification using Artificial Neural Networks*”, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol. 13, 1999.
5. S. Tariq, S.F. Mahmood, & M.S. Laghari, “*Microwave Gaussian Beam Splitting with Variable Split-Angle by using a Chiral Lens*”, AGU Radio Science Journal, Vol. 34, No. 1, 1999.
6. A. Boujarwah, A.K. Ali, K. Saleh, & M.S. Laghari, “*Year 2000 Problems & Solutions: A Kuwait University Experience*”, Kuwait Journal of Science & Engineering, Vol. 26, No. 1, 1999.
7. G.A. Khuwaja & M.S. Laghari, “*A Parameter-Based Combined Classifier for Invariant Facial Expression and Gender Recognition*”, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol. 16, No. 1, 2002.

8. G.A. Khuwaja & M.S. Laghari, "*Adaptive Classifier Integration for Invariant Face Recognition*", International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Vol. 16, No. 6, 2002.
9. G.A. Khuwaja & M.S. Laghari, "*Computer Vision for Wear Debris Analysis*", International Journal of Computer Applications in Technology (IJCAT), Vol. 15, Nos. 1/2/3, 2002.
10. M.S. Laghari, "*Shape and Edge Detail Analysis for Wear Debris Identification*", ISCA's International Journal of Computers and Their Applications, Vol. 10, No. 4, 2003.
11. M.S. Laghari, "*Recognition of Texture Types of Wear Particles*", Neural Computing & Applications Journal (NC&A), Vol. 12, No. 1, pp. 18-25, 2003.
12. M.S. Laghari, Q.A. Memon & G.A. Khuwaja, "*Knowledge Based Wear Particle Analysis*", International Journal of Information Technology (IJIT), Vol. 1, No. 3, pp. 524-528, 2005.
13. Qurban A. Memon and Mohammad S. Laghari, "*Self Organizing Analysis Platform for Wear Particles*", Proceedings of World Academy of Science, Engineering and Technology (PWASET), Vol. 6, 2005.
14. Q.A. Memon & M.S. Laghari, "*Wear Particle Analysis based on Self Organizing Clusters*", International Journal of Robotics and Automation, Vol. 21, No. 4, 2006.
15. M.S. Laghari & Q.A. Memon, "*Building Relationship Network for Machine Analysis from Wear Debris Measurement*", International Journal of Computational Intelligence (IJCI), Vol. 3, No. 2, 2007.
16. Junaid Aziz, Faheem Ahmed and Mohammad Shakeel Laghari, "*Empirical Analysis of Team & Application Size on Software Maintenance & Support Activities*", MASAUM Journal of Basic and Applied Sciences, Vol. 1, No. 2, 2009.
17. Gulzar A. Khuwaja & Mohammad S. Laghari, "*Offline Handwritten Signature Recognition*", Proceedings of the World Academy of Science, Engineering and Technology, Vol. 59, pp. 1300-1303, 2011.
18. Mohammad S. Laghari & Gulzar A. Khuwaja, "*Processor Scheduling on Parallel Computers*", Journal of the World Academy of Science, Engineering and Technology, Vol. 61, pp. 1027-1033, 2012.
19. G.A. Khuwaja & M.S. Laghari, "*Learning Vector Quantization Based Recognition of Off-line Handwritten Signatures*", International Journal of Biometrics, Vol. 4, No. 2, pp. 116-129, 2012.
20. M. S. Laghari & G. A. Khuwaja, "*Course Advising & Planning for Electrical Engineering Department*", Journal of Educational and Instructional Studies in the World (WJEIS), Vol. 2, No. 2, pp. 171-181, 2012.
21. M.S. Laghari & G.A. Khuwaja, "*Student Advising and Planning Software*", International Journal on Trends in Education and Their Implications (IJONTE), Vol. 3, No. 3, pp. 158-175, 2012.
22. M. S. Laghari & G. A. Khuwaja, "*Scheduling Techniques to Classify Wear Particles on Multi-Computers*", International Journal of New Computer Architectures and their Applications (IJNCAA), Vol. 3, No. 1, pp. 52-71, 2013.
23. Gulzar Khuwaja and Mohammad Laghari: "*Human Identification Algorithm Performance Evaluation*", International Journal of Sciences, Vol. 2, No. 2, pp. 453-458, 2013.
24. M. S. Laghari, "*Automated Course Advising System*", International Journal of Machine Learning and Computing (IJMLC), Vol. 4, No. 1, pp. 47-51, 2014.

25. M. S. Laghari, "*Hough Transform Implementation by using Parallel Paradigms*", accepted for International Journal on Recent Trends in Engineering & Technology (IJRTET), Vol. 10, No. 3, 2014.
26. M. S. Laghari, "*Identification of Faulty BGA Solder Joints in X-Ray Images*", accepted for International Journal of Computer and Communication Engineering (IJCCE), 2014.

Papers in International Conference Proceedings

27. M. S. Laghari & F. Deravi, "*A Hybrid Technique of Process Scheduling in Cellular Automaton*", Conference Proceedings, "Parallel Computing in Engineering and Engineering Education", UNESCO Paris, October 1990.
28. M. S. Laghari & F. Deravi, "*Static vs. Dynamic Scheduling in Cellular Automaton*", Conference Proceedings, "North American Transputer Users Group, Fall Meeting", Ithaca, New York, October 11 & 12, 1990.
29. M. S. Laghari & F. Deravi, "*A Hybrid Scheduling Technique for the Parallel Implementation of the Hough Transform*", Poster Session, "Parallel Computing 91", London, U.K., September 3 - 6, 1991.
30. M. S. Laghari & F. Deravi, "*Scheduling Techniques for the Parallel Implementation of the Hough Transform*", Conference Proceedings, "Engineering Systems Design and Analysis - ESDA", Istanbul, Turkey, June 29 - July 3, 1992.
31. M. S. Laghari, I. A. Albidewi, A. R. Luxmoore, B. J. Roylance, T. Davies & F. Deravi, "*Computer Vision System for the Recognition of Wear Particles*", Conference Proceedings, "Second International Conference on Automation, Robotics and Computer Vision", Singapore, September 15 - 18, 1992.
32. M. S. Laghari, I. A. Albidewi, A. R. Luxmoore, B. J. Roylance, T. Davies & F. Deravi, "*Knowledge Based Computer Vision System for the Classification of Wear Particles*", Conference Proceedings, "The Seventh International Symposium on Computer and Information Sciences", Antalya, Turkey, November 2 - 4, 1992.
33. M. S. Laghari, I. A. Albidewi, A. K. Muhamad, A. R. Luxmoore, B. J. Roylance, T. Davies & F. Deravi, "*Wear Particles Identification using Computer Vision*", Conference Proceedings, "International Conference on Signal Processing Applications and Technology", Boston, U.S.A., November 2 - 5, 1992.
34. M. S. Laghari, "*Computer Vision in the field of Tribology*", Conference Proceedings, "Second Conference on Information Technology and its Applications - ITA 92", Markfield Conference Center, Leicester, U.K., December 19 & 20, 1992.
35. M. S. Laghari & F. Deravi, "*Processor Scheduling Techniques for Multi-computers*", Conference Proceedings, "Second Conference on Information Technology and its Applications - ITA '92", Markfield Conference Center, Leicester, U.K., December 19 & 20, 1992.
36. M. S. Laghari, I. A. Albidewi, A. K. Muhamed, & B. J. Roylance, "*Wear Particle Texture Classification using Artificial Neural Networks*", Conference Proceedings, "3rd Nordic Transputer Conference", Gentofte, Copenhagen, Denmark, May 12 - 14, 1993.
37. M. S. Laghari & A. Boujarwah, "*Wear Particle Identification using Image Processing Techniques*", Conference Proceedings, "ISCA's 5th International Conference on Intelligent Systems", Reno, Nevada, U.S.A., June 19 - 21, 1996.
38. M. S. Laghari, A. Boujarwah, & B. Qurashi, "*Comparison of Scheduling Techniques for the Parallel Implementation of Wear Particle Identification Algorithms*", Conference Proceedings, "8th IASTED International Conference on Parallel and Distributed Computing and Systems", Chicago, Illinois, U.S.A., October 16 - 19, 1996.

39. M. H. Karaata, M. S. Laghari, S. Ghosh, & S. V. Pemmaraju, "*Self-Stabilizing Algorithms for Dominance Posets*", Conference Proceedings, "IASTED International Conference on Modeling and Simulation", Pittsburgh, Pennsylvania, USA, May 13 - 16, 1998.
40. M. S. Laghari, A. Boujarwah, & M. H. Karaata, "*Determination of Wear Particle Characteristics by Computer Vision*", Conference Proceedings, "IASTED International Conference on Artificial Intelligence and Soft Computing", Cancun, Mexico, May 27 - 30, 1998.
41. J.A. Saghri, M.S. Laghari, A. Boujarwah, & G.S. Tescher, "*Spectral-Signature-Preserving Transform Coding of Multispectral Data*", Conference Proceedings, "SPIE's 43rd International Symposium on Signal and Image Processing", San Diego, California, July 21-24, 1998.
42. M. H. Karaata & M. S. Laghari, "*A Fault-Tolerant Distributed Algorithm for Finding Cut-Nodes*", Conference Proceedings, "13th International Symposium on Computer and Information Sciences (ISCIS'98)", Antalya, Turkey, October 26 - 28, 1998.
43. M. S. Laghari, Q.A. Memon & G. A. Khuwaja, "*Knowledge Based Wear Particle Analysis*", Conference Proceedings, "International Conference on Information Technology (ICIT)", Istanbul, Turkey, December 17 - 19, 2004.
44. M. S. Laghari, Q. A. Memon & Habib ur Rehman, "*Advising for Course Registration: A UAE University Perspective*", Conference Proceedings, "International Conference on Engineering Education (ICEE)", Gliwice, Poland, July 25-29, 2005.
45. Qurban A. Memon & M. Shakeel Laghari, "*Role Based Approach to Data Access in Adhoc Networks*", Conference Proceedings, "The 4th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-06)", Sharjah/Dubai, U.A.E., March 8 - 11, 2006.
46. M. S. Laghari, "*A Texture Classification System using Cooccurrence Matrices*", Conference Proceedings, "International Conference on Communications, Computer and Power (ICCCP'07)", Muscat, Oman, February 19 - 21, 2007.
47. M. S. Laghari, "*Morphological Analysis of Microscopic Wear Particles*", Conference Proceedings, "2nd International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO'07)", Abu Dhabi, UAE, March 24 - 27, 2007.
48. M. S. Laghari, "*Wear Particle Profile Analysis by using Fourier Analysis*", Conference Proceedings, "5th IEEE International Workshop on Signal Processing and its Applications (WoSPA'08)", Sharjah, UAE, March 18-20, 2008.
49. M. S. Laghari, "*Automation in the Field of Wear Particles*", Conference Proceedings, 5th International Conference on Information Technology and Applications (ICITA 2008), Cairns, Queensland, Australia, June 23 - 26, 2008.
50. M. S. Laghari, "*Wear Particle Analysis by using AI Techniques*", Conference Proceedings, "3rd International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO'09)", Sharjah, UAE, January 20 - 22, 2009.
51. Faheem Ahmed, Junaid Aziz and Mohammad Shakeel Laghari, "*Empirical Analysis of Team & Application Size on Software Maintenance & Support Activities*", Conference Proceedings, "International Conference on Information Management and Engineering (ICIME 2009)", Kuala Lumpur, Malaysia, April 3 - 5, 2009.
52. Piers Campbell, Faheem Ahmed, & Mohammad Laghari, "*Cognitive Factors in Software Product Line Engineering*", Conference Proceedings, "11th International Conference on Computer Modelling and Simulation (UKSim 2009)", Cambridge, England, March 25 - 27, 2009.

53. M. S. Laghari & F. Ahmed, "*Wear Particle Profile Analysis*", Conference Proceedings, "IEEE International Conference on Computer Design and Applications (ICCD 2009)", Singapore, May 15 - 17, 2009.
54. M. S. Laghari & F. Ahmed, "*Classification of Wear Particle Shape & Edge Details*", Conference Proceedings, "7th International Conference on Robotics, Vision, Signal Processing and Power Applications (RoViSP 2009)", Kedah, Malaysia, December 19 - 20, 2009.
55. M. S. Laghari, F. Ahmed, & J. Aziz, "*Computer Vision in the Field of Wear Particles*", Conference Proceedings, "The 2nd International Conference on Computer and Electrical Engineering (ICCEE 2009)", Dubai, UAE, December 28 - 30, 2009.
56. M. S. Laghari, F. Ahmed, & J. Aziz, "*Wear Particle Shape & Edge Detail Analysis*", Conference Proceedings, "2nd IEEE International Conference on Computer and Automation Engineering (ICCAE 2010)", Singapore, February 26 - 28, 2010.
57. M. S. Laghari, R. Hijer, & G. A. Khuwaja, "*Efficient Technique for BGA Solder Joints Identification in Low Resolution X-Ray Images*", Conference Proceedings, "6th IEEE GCC Conference & Exhibition 2011", Dubai, UAE, February 12 - 15, 2011.
58. Mohammad S. Laghari, Tariq R. Soomro, & Gulzar A. Khuwaja, "*The use of Fourier Descriptors to Recognize Particle Profile*", Conference Proceedings, "4th IEEE International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO'11)", Kuala Lumpur, Malaysia, April 19 - 21, 2011.
59. Tariq Rahim Soomro, Mohammad S Laghari, & Hasan Wahba, "*A2AShare: Towards Multilingual Academic P2P*", Conference Proceedings, "International Conference on Sociality and Economics Development (ICSEP 2011)", Kuala Lumpur, Malaysia, June 17 - 19, 2011.
60. Gulzar A. Khuwaja & Mohammad S. Laghari, "*Offline Handwritten Signature Recognition*", Conference Proceedings, "13th IEEE International Conference on Computer Vision (ICCV-2011)", Barcelona, Spain, November 6 - 13, 2011.
61. Mohammad S. Laghari & Gulzar A. Khuwaja, "*Scheduling Techniques of Processor Scheduling in Cellular Automaton*", Conference Proceedings, "International Conference on Intelligent Computational Systems (ICICS'2012)", Dubai, UAE, January 7 - 8, 2012.
62. Mohammad S. Laghari & Gulzar A. Khuwaja, "*Processor Scheduling on Parallel Computers*", Conference Proceedings, "International Conference on Computer, Electrical, and Systems Sciences, and Engineering", Abu Dhabi, UAE, January 29 - 31, 2012.
63. Mohammad Shakeel Laghari & Gulzar Ali Khuwaja, "*Electrical Engineering Department Advising for Course Planning*", Conference Proceedings, "IEEE International Conference on EDUCON", Marrakesh, Morocco, April 17 - 20, 2012.
64. M. S. Laghari & G. A. Khuwaja, "*Course Advising & Planning for Electrical Engineering Department*", Conference Proceedings, "3rd International Conference on New Trends in Education and their Implications (ICONTE 2012)", Antalya, Turkey, April 26-28, 2012.
65. M. S. Laghari & G. A. Khuwaja, "*A Bimodal Biometric Identification System*", Conference Proceedings "4th International Conference on Graphics and Image Processing (ICGIP-2012)", Singapore, October 6 - 7, 2012.
66. M. S. Laghari & G. A. Khuwaja, "*Scheduling Techniques for Parallel Implementation of Wear Particle Recognition Algorithms*", Conference Proceedings, "The Third International Conference on

Digital Information Processing and Communications (ICDIPC 2013)", Dubai, UAE, January 30 - February 1, 2013.

67. Khuwaja, G A and Laghari, M S: "*Human Identification Algorithm Performance Evaluation*", Conference Proceedings, "International Journal of Arts and Sciences' Conference for Academic Disciplines", Toronto, Canada, May 20 - 23, 2013.
68. Gulzar A. Khuwaja & Mohammad S. Laghari, "*Compressed mammograms for breast cancer detection*", submitted for Conference Proceedings, "The 3rd International Conference on Current and Future Trends of Information and Communication Technologies in Healthcare (ICTH)", Niagara Falls, Canada, October 21-24, 2013.
69. Gulzar A. Khuwaja & Mohammad S. Laghari, "*Compressed mammograms for breast cancer detection*", Conference Proceedings, "The 3rd International Conference on Current and Future Trends of Information and Communication Technologies in Healthcare (ICTH)", Niagara Falls, Canada, October 21-24, 2013.
70. M. S. Laghari, "*Automated Course Advising System*", Conference Proceedings, "2nd International Conference on Information and Intelligent Computing (ICIIC)", Kuala Lumpur, Malaysia, December 29-30, 2013.
71. M. S. Laghari, "*Electrical Engineering Course Planning System*", Conference Proceedings, "The 8th International Conference on Engineering and Technology Research", Dubai, April 24-25, 2014.
72. Aysha A.A.A. Al Neyadi, Fatima M.O.R. Hilal, & M.S. Laghari, "*Course Planning System*", Conference Proceedings, "6th Annual Conference on Undergraduate Research on Applied Computing (URC2014)", Dubai, April 30 - May 1, 2014.
73. M.S. Laghari, "*Identification of Faulty BGA Solder Joints in X-Ray Images*", Conference Proceedings, "5th International Conference on Networking and Information Technology (ICNIT 2014)", Singapore, November 21-23, 2014.

Other Publications

74. B. J. Roylance & M. S. Laghari, "*Determination of Particle Shape and Other Characteristics by Image Analysis – Phase 2*", Final Report, Ministry of Defense, U.K., June 1993.
75. M. S. Laghari, "*Processor Scheduling for Transputer Networks*", Ph.D. Thesis, University of Wales, Swansea, U.K., July 1993.
76. M. S. Laghari, "*Automation in the field of Tribology*", The Engineer, UAE University Magazine, ENGEX'2002.
77. M. S. Laghari & A. M. Al-Amiri, "*A working document on Graduation Project Courses I & II*", UAE University Publication, 2003/2004.
78. M. S. Laghari & Nabil Bastaki, "*Digital Logic Design Lab. Manual*", On-line UAE University Publication, 2007.
79. M. S. Laghari & Noura Al Khalifi, "*Digital Logic Design Laboratory Manual (Revised)*", UAE University, February, 2010.
80. M. S. Laghari, "*Use of Educational Technologies at FOE*", UAE University Publication, 2011.
81. M. S. Laghari, "*Tablet PCs and eBooks – A Potential Transition of Educational Technologies at UAEU*", UAE University Publication, 2011.

COMPUTER KNOWLEDGE:

Platforms: PCs (Pentium systems with multimedia and multitasking operating systems), Pyramid Main Frame, Sun connected Meiko Computing Surface, Sun Sparc20's, Apollo Domains, Inmos Transputer Development System (TDS), & Transputer Modules from Transtech (TRAM's).

Operating Systems: UNIX, VAX/VMS, MS-Windows 2000, NT, & XP, Solaris, & Occam Programming System (OPS).

Software Environments: Latex, Framemaker, STP CASE (*Computer Aided Software Engineering*) Tools, ATTOL CASE tools, Logiscope CASE tools, Interleaf, Sunview, UNIX shells, Web page design using HTML and Microsoft Office FrontPage 2003, NetOP, Blackboard 6, Macromedia Flash MX, Macromedia Dreamweaver MX 2004, & Macromedia Dreamweaver 8.

Computer Languages: Occam 2, C, C++, 3L Parallel C, FORTRAN, Lisp, Visual Basic, Prolog, JAVA, Python, & J2ME.

CURRENT EMPLOYMENT:

09/2000 – 04/2004 **Assistant Professor,**
05/2004 – onwards **Associate Professor,**
Department of Electrical Engineering,
United Arab Emirates University, Al-Ain, U.A.E.

RESEARCH GRANT:

Research grant No. EPE-70 (Oct. 1995 - May 1998), Principal Investigator, Title: Wear Particle Identification using Computer Vision and Image Processing, Budget: Kuwaity Dinar 18,040/-

Innovations grant No. 491 – 2001, Title: Interactive Operating Systems Project, by using Microsoft PowerPoint, Budget: UAE Dhs. 9,300/-

Innovations grant No. 264 – 2002, Title: Interactive Operating Systems Project Phase II, by using Microsoft PowerPoint and Java programming, Budget: UAE Dhs. 12,000/-

Research grant No. 136 – 2005, Co-Investigator, Title: Role Analysis and Management for Access Security using Self Organizing and Hierarchical Clusters, Budget: UAE Dhs. 13,000/-

Innovations grant No. 457 – 2005, Title: Interactive Digital Logic Design, by using Microsoft PowerPoint and Java programming, Budget: UAE Dhs. 6,250/-

ADMINISTRATIVE AND COMMITTEE ASSIGNMENTS:

Kuwait University

- Member of the computer engineering program committee, 1994/95
- Class schedule coordinator for computer engineering, 1994/95
- College course coordinator for the "Computer Programming for Engineers" course, 1994/95
- Member of the committee for the academic performance of the students in the ECE dept., 1995
- Student's affairs coordinator for computer engineering program, 1996 - 1998
- Class schedule coordinator for computer engineering, 1996/97
- Member of the laboratories & equipment committee, 1997/98
- Member of the ABET EC 2000 committee for experiments in computer engineering, 1997 - 1999
- Student counseling (1990, 1991, and 1997 student batch)
- Contributed to the M.S. qualifying examination, 1997 - 1999
- Contributed in the curriculum design for undergraduate studies, 1998/1999

King Saud University

- Contributed in the curriculum design for undergraduate studies, 1999/2000

UAE University Committees

University Committees

- University Member: Curriculum committee, 2012 - 2014
- University Head: eBooks & Tablet committee, 2011 - 2012
- University Member: Review of Blackboard and Alternatives, 2011 - 2012
- University Member: IT Skills committee, 2011 - 2012
- University Member: IT Policies & Procedures committee, 2011 - 2012
- University Member: Power Training / Cybercrime & Cyber-terrorism committee, 2011 - 2012
- University Member: Educational Technologies committee, 2011 - 2012

College Committees

- College Head: IT and Website Unit, 2002 - onwards
- College Coordinator: Graduation Projects Unit, 2004 - 2014
- College Head: Curriculum committee, 2012 - 2014
- College Member: Curriculum committee, 2009 - 2012
- College Member: Peer Evaluation of Teaching committee, 2004 - 2007, 2011 - 2014
- College Member: IT Specialist Recruiting committee, 2007 - 2008, 2012 - 2014
- College Member: Programming for Engineering committee, 2014/2015
- College Member: ERU Courses Critical Review committee, 2011/2012
- College Member: ERU Instructors Recruitment committee, 2011/2012
- College Member: Semiconductor Research Corporation (SRC) committee, 2011/2012
- ERU Coordinator: "Introduction to Programming" (GENG 200) course, 2007 - 2009
- College Member: Editorial Committee - Emirates Journal for Engineering Research, 2006 - 2008
- College Coordinator: COE using Remedy and Ticket Tracking System, 2006 - 2009
- College Member: Receiving and Technical Inspection Committee, 2006 - 2008
- College Member: IBIS Luminis UAEU Web Portal, 2006 - 2008
- UAEU Coordinator: for GCC Engineering Colleges Website, 2005/2006
- College Coordinator: Exit Exams, 2004/2005
- College Member: Teaching Performance Committee 2002/2003
- College Member: Committee for Computer Facilities & Applications, 2001/2002
- College member: Laptop Project Innovation committee, 2001/2002

Department Committees

- Department Head: Committee for Major and Minor Combinations, 2013 - 2014
- Department Head: Educational Outcome Assessment committee, 2013 - onwards
- Department Head: Curriculum committee, 2009 - 2014
- Department Head: Computer Focus Group, 2002 - 2004, 2007 - 2010, 2014 - onwards
- Department Head: Faculty Promotion committee, 2011 - 2013
- Department Head: Computer Engineering Program in CIT committee, 2012/2013
- Department Head, Committee for Major and Minor Combinations, 2012/2013
- Department Member: Educational Outcome Assessment committee, 2000 - 2011
- Lab. Coordinator, Shared Computer Labs., 2011 - onwards
- Course Scheduling and Advising Coordinator, 2004 - 2011
- Department Member: Teaching Load committee, 2013 - onwards
- Department Member: Computer Focus Group, 2004 - 2007, 2010 - 2014
- Academic Student Adviser year 2009 students (female), 2011 - onwards
- Academic Student Adviser year 2006 students (female), 2008 - 2011
- Academic Student Adviser for year 2000 students (male), 2001 - 2008

- Department Member: Career Readiness Program for Graduating Students, 2012 - onwards
- Department Member: Research Affairs committee, 2004/2005, 2011/2012
- Department Member: Graduate Program committee, 2005 - 2011
- Software Engineering Laboratory Coordinator, 2002 - 2011
- Department Member: Faculty Promotion committee, 2007/2008
- Department Member: Curriculum committee, 2001 - 2004
- Organizing Committee Member, Female Activities Day, 2011/2012
- Designer of the Female Activities Day Website, 2011/2012
- Organizing Committee Member: The EE Department Open Day, 2006/2007
- Department Coordinator: for the participation of EE students at the Microsoft .NET Club, 2006/2007
- Department Member: Exit Exam committee, 2002 – 2004, 2010/2011
- Department Member: ABET committee, 2001/2002

MEMBERSHIP IN ACADEMIC ORGANIZATIONS:

Member: IASCIT (Singapore), ISCA (USA), PEC (Pakistan), IRED (USA), UPCEE (USA).

Biographical profile published in the 22nd (2005) & 23rd (2006) Editions of Who'sWho in the World and 9th (2006-2007) Edition of Who'sWho in Science and Engineering.