Mohammad I. Jilani

CEO, Counterfeit Combat Technology USA Adjunct Professor of MIS at Argosy University – Chicago Associate Professor of SE at JUST

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MAJOR HIGHLIGHTS:

- 1- Counterfeit Combat Technology. I have developed the requirements, specifications, and architecture for a system aimed at preventing counterfeit in documents and products.
- 2- I have developed an architecture for in-vehicle-biofeedback system to detect driver impairment conditions using facial expression, eye characteristics, and physiological measures

INDUSTRIAL EXPERIENCE:

- Counterfeit Combat Technology, USA; 2014- Now.
- Human Emotion Detection Using Biometrics and Adaptive Learning Technology 2014-Now
- Cambium Networks USA: Senior Wireless Broadband System Architect; 2012 2014
- SUN Microsystems: Senior system architect 2004-2008
- Motorola Inc.: Senior member of technical staff; 1999-2004
- SPRINT PCS: Consultant 2004-2010
- Jordan University of Science and Technology: Director of IT;
- Petroleum Refinery Company in Jordan: 1992-1998

BUISNESS EXPERIENCE

- Founder and Principal Investigator of Counterfeit Combat Technology, USA
- Founder and Principal Investigator of InSys: Human Emotion Detection Using Biometrics and Adaptive Learning Technology

EDUCATION:

- Ph.D. Computer Science, University of Illinois at Urbana-Champaign, 1986.
- MS. Computer Engineering, Yarmouk University
- BS. Computer Engineering, Tashkent Polytechnic Institute

ACADEMIC EXPERIENCE:

1986-1992	Assistant Professor University of Wisconsin-Milwaukee.
2006-2007	Visiting Research Scientist at University of Illinois at Urbana Champaign.
2008-Present	Adjunct Professor at Argosy University, Chicago USA.
2010-2012	Dean of Engineering at Jadara University - Jordan
2014-Present	Associate Professor at Jordan University of Science and Technology

PUBLICATIONS:

 A novel Neuro-Fuzzy Model to Detect Human Emotions Using Different Set of Vital Factors with Performance Index Measure, Journal of Communications Software and Systems (JCOMSS), 2018

- 2. An Optimization Method Using Clustering Technique for the Human Emotions Detection Artificial Neuro-Fuzzy Logic System Omayya Murad · Mohammed Malkawi , International Journal of Computers & Technology Vol. 15m Number 9, ISSN 2277-3061, May 2016
- 3. A NOVEL OPTIMIZATION ALGORITHM TO DETECT HUMAN EMOTIONS USING ARTIFICIAL INTELLIGENCE TECHNIQUES, International Business Information Management Association (IBIMA), Amsterdam, May 2015
- 4. A HIERARCHICAL SUGENO-MAMDANI ANFIS MODEL FOR SOLVING COMPLEX SYSTEMS, 26th, IBIMA conference, Madrid, Spain Abeer I. Albashiti · Mohammad Malkawi · Mohammed Khasawneh, Conference Paper · Nov 2015
- 5. Architectural Framework For Decision Support for Connectivity and Mobility on Roads and Vehicles Using Fuzzy Logic and Neural Networks, Conference: 26th, IBIMA, Madrid, Spain, November 2015
- 6. "The art of software systems development: Reliability, Availability, Maintainability, Performance (RAMP)", Journal of Human-centric Computing and Information Sciences 2013, **3**:22 doi:10.1186/2192-1962-3-22, Published: 21 December 2013
- 7. "Artificial Neuro Fuzzy Logic System for Detecting Human Emotions", Journal of Human-centric Computing and Information Sciences, 2013, 3-3, DOI: 10.1186/2192=1962-3-3, URL: http://www.hcis-journal.com/content/3/1/3 (also appeared in the proceedings of the 2012 International Conference on Computer, Information, and Telecommunication Systems, CITS 2012).
- 8. "A Localized Navigation Algorithm for Radiation Evasion for Nuclear Facilities; Optimizing the "Nearest Exit" Criterion; Part I"; Nuclear Engineering & Design Journal by Elsevier, 2011
- 9. "Maximum Clique Conformance Measure for Graph Coloring Algorithms", submitted to *Journal of Graph Theory*, 2011
- 10. "Empirical Data and Analysis of Defects in Operating Systems Kernels", submitted to Elseiver Journal of Systems and Software, 2011
- 11. "Inward Strategy: An Optimal Solution to Build a New Software Industry in Saudi Arabia", 14th IBIMA Conference", Istanbul-Turkey, June 23-24, 2010 Republished in IBIMA Business Review Journal, Vol. 2011 (2011), Article ID 126226, 16 pages
- 12. "Memory Leak Masking Using Dual Heap Organization", submitted to *IEEE Transaction* on *Software Engineering*, 2010
- 13. "A Novel Run-Time Memory Leak Detection and Recovery (MLDR) Using Aging in Physical Memory Space", *International Journal on Computers and Network Security, Vol.* 2, No. 5, May 2010
- 14. "Empirical Data and Analysis of Defects in Operating Systems Kernels", submitted to International Journal on Computers and Network Security, 2010
- 15. "Coloring of Triangle Free Girth Graphs with Minimal k-Colors", International Journal on Computers and Network Security, Vol. 2, No. 5, May 2010
- 16. "Technologies that can Enforce the Nuclear Safeguard Regime", *Proceedings of the 1st International Nuclear and Renewable Energy Conference (INREC10)*, Amman, Jordan,

- March 21-24, 2010 (accepted for publication at the Nuclear Engineering and Design Journal
- 17. "Modeling and Simulation of a Robust e-Voting System", 11th IBIMA Conference on Innovation and Knowledge Management", Cairo-Egypt, January 3-6 2009
- 18. "Modeling and Simulation of a Robust e-Voting System", *Communications of the IBIMA*, 2009, *Volume 8, number 26, pages 198-206*
- 19. "An Orthogonal Method for Evaluating Security Levels, Measures and Deficiencies", 11th
 IBIMA Conference on Innovation and Knowledge Management", Cairo-Egypt, January 3-6
 2009
- 20. A graph-Coloring –Based Navigational Algorithm for Personnel Safety in Nuclear Applications", Proceeding of the 6th International Symposium on Mechatronics and its Applications (ISMA09), Sharjah, UAE, Mar 23-26, 2009
- 21. "A security-embedded infrastructure for Tele-Traffic Speed Control", *Journal of the Frankilin Institute*, <u>www.elsevier.com/locate/jfranklin</u>, 2009
- 22. "A Biometric-Secure e-Voting System for Election Processes", Fifth International Symposium on Mechatronics and its Applications, 27-29 May, 2008, Amman, Jordan
- 23. "A Secure Novel Sensor Fusion Architecture for Nuclear Applications", Fifth International Symposium on Mechatronics and its Applications, 27-29 May, 2008, Amman, Jordan
- 24. "A New Exam Scheduling Algorithm Using Graph Coloring", *The International Arab Journal of Information Technology*, Volume 5, Number 1, 2008; pp. 80-86
- 25. "Building Arab Software Industry: An Expansion to the Indian Model", International Conference on Ubiquitous ICT for Sustainable Education and Cultural Exchange, October 6-7 2008, Hämeenlinna, Finland.
- 26. "Emerging Trends in Biomedical Informatics: Designing a Curriculum to Address the Current Job Market", *The International Medical Informatics And Biomedical Engineering Symposium*, March 20-22, 2007 Jordan.
- 27. "Challenges to High Productivity Systems", invited keynote speech, *International Conference on Computer and Communication Engineering May, 2006 (ICCCE'06)*
- 28. "Optimizing Engineering Education in Arab Universities: Toward Industry-Oriented Outcomes", *International Forum on Engineering Education IFEE2006 Integrating Teaching and Research with Community Service* 25-27 April 2006, University of Sharjah Sharjah, United Arab Emirates
- 29. "Technology Education Using a Novel Approach in e-Learning—Towards Optimizing the Quality of Learning Outcomes", *International Forum on Engineering Education IFEE2006 Integrating Teaching and Research with Community Service* 25-27 April 2006, University of Sharjah Sharjah, United Arab Emirates
- 30. "Spectrum Management and the 800 MHz Rebanding", *Mobil Radio Technology, June 1*, 2005
- 31. "A Wireless Infrastructure for Traffic Speed Control", *Conference on IT and Organization in the 21st Century*, Amman, Jordan, July 2004, pp. 73-84
- 32. "Intermod60: A High Speed Intermodulation & Interference Analysis Tool", *White paper*, 2004, www.aimws.com
- 33. "A New Model for Software Industry in the Arab Countries", Proceed. *Information and Communication Technology- Industry Partnership Conference, Dec. 6-7, 2004 Jordan*

- 34. "Analysis of Failure Data in Telecomm Systems", *International Conference on Dependable Systems and Networks (DSN 2002)*
- 35. "Availability Work Products A Strategic Approach", IEEE Signal Processing Society 5thWSES International Conference, Crete, July 2001
- 36. "Analysis of Failure and Recovery Rates in a Wireless Telecommunications System", *IEEE Signal Processing Society 5thWSES International Conference, Crete, July 2001*
- 37. "Software Systems Availability Modeling and Analysis", Motorola Report and Motorola Symposium on Software Engineering, Phoenix, AZ, June 2000.
- 38. "Selector Distribution Unit (SDU) Platform Availability Modeling and Analysis", Motorola Report, Augast, 2000
- 39. "High Availability Models for Common Platform BTS", Motorola Report, Nov. 1999
- 40. "Distributed Virtual Memory Multicomputer Systems" PDPTA, Las Vegas, July 1998
- 41. "Infrastructure for Distributed Multimedia Applications" EUROMED Conference April, 1998, Malta
- 42. "Distributed Sorting Algorithms in Hypercube Systems"; IASTED, Int. Conference on Parallel Distributed Systems, Oct. 1997
- 43. "Infrastructure for Electronic Commerce Applications"; EUROMED Int. Conference on Electronic Commerce, Greece, July, 1997.
- 44. "Digital Electronic Library in the Arab World", UNESCO Int. Conference, Tunis, May, 1997
- 45. "Process Migration in Distributed Virtual Memory Systems," 26th Hawaii Int. Conference on System Sciences, 1993
- 46. "Performance Evaluation of Page Replacement and Page Out Policies in Distributed Virtual Memory Systems," 4th IEEE Symposium on Parallel and Distributed Systems, December, 1992.
- 47. "Estimation of Memory Requirements of Numerical Programs at Compile Time," 5th Int. Conference of Architectural Support for Programming Languages and Operating Systems, 1992.
- 48. "Empirical Results on the Dynamic Behavior of a Distributed Virtual Memory System", ISMM 5th International Conference on Parallel and Distributed Computing Systems, Oct. 1992
- 49. "Distributed Algorithms for Edge Coloring of Graphs," 5th ISMM Int. Conference on Parallel and Distributed Computing Systems, 1992
- 50. "Paging Behavior in Distributed Virtual Memory Systems," 21st Int. Conference on Parallel Processing, 1992
- 51. "Dynamic Page Distribution in Distributed Virtual Memory Systems," 4th ISMM/IASTED Int. Conference on Parallel and Distributed Systems, 1991
- 52. "Analysis of a Graph Coloring Based Distributed Load Balancing Algorithm", *Journal of Parallel & Distributed Systems*, 1990, vol. 10
- 53. "Graph Coloring Based Distributed Load Balancing Algorithm and Its Performance Evaluation," 4th Annual Symposium on Parallel Processing, 1990.
- 54. "System Theory Modeling and Performance Analysis of a Distributed Load Balancing Algorithm," 32nd Midwest Symp. on Circuits and Systems, 1989
- 55. "Distributed Algorithms for Load Balancing in Very Large Homogeneous Systems," Fall Joint Computer Conference, 1987

- 56. "Performance Measurement of Paging Behavior in Multiprogramming Systems," 13th Annual Int. Conference on Computer Architecture, 1986.
- 57. "Compiler Directed Memory Management Policy for Numerical Programs," ACM SIGOPS 10th Symposium on OS Principles, 1985
- 58. Identifying Two Program Categories for Memory Management Purposes, "IEEE 8th Int. COMPSAC Conference, 1984
- 59. Experimental Results on the Paging Behavior of Numerical Programs," 6th Int. Conference on Software Engineering, 1982