Ammar (Elhassan) Al Rashdan (Ph.D., MCTS)

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Nationality: Jordan / UK Date of Birth: 10 June 1968

HIGHLIGHTS

- Academic Administration Leadership at Department and College levels.
- Saudi-NCAAA Academic Accreditation External Reviewer
- ABET Accreditation several programs completed successfully with vision, plan, process, team leadership and data management
- Applied research in designing and implementing data mining and machine learning systems to address academic attainment shortcomings
- Curriculum design and deployment at Diploma, BSc and MSc levels
- Very keen on Sustainable Development with active participation in EU EOSD International Greening Event

EDUCATION

<u>2000</u>

Ph.D. Computer Science

University of Surrey UK (top 10 in UK)

Object Oriented Systems - Behavioural Modelling of Complex Reactive Systems

1991

MSc Information Systems

University of East Anglia UK

Database Performance Optimisation - Ingres SQL

1989

BSc Computer Science

Yarmouk University Jordan

Programming Languages, Database Systems, Operating Systems, Operations Research, Maths, Stats, English

PROFESSIONAL CERTIFICATION

<u>2013</u> <u>2007</u>

QAA/NCAAA External Reviewer Training MCP .Net Windows Applications with C#

<u>1998</u>

NCAAA Self Study Reports Advanced Client Server Applications

2008 1997

MCTS .Net Windows Applications with C# Reporting Techniques in Crystal – Training

AFFILIATION

- International Association of Engineers (IAENG)
- British Computer Society (BCS)

- IEEE
- The Society of Digital Information and Wireless Communications (SDIWC)

CAREER

Sep '18 – Date

Princess Sumaya University for Technology, Jordan

King Hussein School of Computing Sciences

Department of Computer Science

Sep '17 – June '18

Ajman University, UAE

College of Information Technology

Aug '13 – June '17

Prince Mohammad Bin Fahd University, Saudi Arabia pmu.edu.sa

Acting Dean – College of Computer Engineering & Science

Sep '09 – June '13

Prince Mohammad Bin Fahd University, Saudi Arabia pmu.edu.sa

Assistant Prof and Chair - IT

College of Computer Engineering & Science

Feb '08 - July 2009

University of Hail, Saudi Arabia uoh.edu.sa

Assistant Prof

Department of Computer Science and Software Engineering

1998 - 2008

Pulse Software Systems Ltd UK <u>pulsesoftware.co.uk</u>

Senior Analyst Programmer

1997 - 1998

Fidelity Investments – UK fidelity.com

Programmer/Developer

1994 - 1997

MIS, University of Surrey UK surrey.ac.uk

Analyst Programmer

<u> 1992 - 19</u>94

Research Services Office, University of Surrey UK surrey.ac.uk

Analyst Programmer

RESEARCH

Areas include Operations Research/Optimization, AI, Machine Learning, Assistive Technology, Bio-Informatics & VHDL designs for human/animal hormone functions simulation.

Journals

- 1- JM Alghazo, G Latif, L Alzubaidi, **A Elhassan** "Multi-Language Handwritten Digits Recognition based on Novel Structural Features", Journal of Imaging Science and Technology March 2019, 63 (2), 20502-1-20502-10
- 2 **A. Elhassan**, I. Jenhani, G. Ben Brahim. "Remedial Actions Recommendation via multi-Label Classification: A Course Learning Improvement Method". International Journal of Machine Learning and Computing, Vol. 8, No. 6, December 2018. doi: 10.18178/ijmlc.2018.8.6.749.
- 3 J. Ghazo, O. Ouda, **A. Elhassan**. "E-waste Environmental and Information Security Threat: GCC Countries vulnerabilities" Jan 2018, Euro-Mediterr J Environ Integr (2018) 3: 13. https://doi.org/10.1007/s41207-018-0050-4
- 4 J. Al Ghazo, G. Latif, R. Hmouz, **A. Elhassan**, L. AlZubaidi. "An Online Numeral Recognition System Using Improved Structural Features A Unified Method for Handwritten Arabic and Persian Numerals", Journal of Telecommunication, Electronic & Computer Engineering (JTEC) Special Issue (CITA`17)
- 5 J M. Alghazo, G Latif, **A. Elhassan**, L Alzubaidi. "Multi-Language Handwritten Digit Recognition based on Novel Structural Features and Random Forest", International Journal of Machine Learning and Cybernetics *Submitted*, May 2017
- 6 Huseyin M. Cekirge, Omar K. M. Ouda, **Ammar Elhassan**, "A Method for Preparing Environmental Social Impact Assessment (ESIA) of Crude Oil and Gas Pipelines", International Journal of Environmental Monitoring and Analysis May 2015, Vol. 3, No. 3, 2015, pp. 154-161. doi: 10.11648/j.ijema.20150303.17
- 7 H. M. Cekirge, **A. Elhassan**, O. K. M. Ouda, "A Comparison of Solar Power Systems (CSP): Solar Tower (ST) Systems versus Parabolic Trough (PT) Systems", American Journal of Energy Engineering Volume 3, Issue 3, May 2015, Pages: 29-36
- 8 Huseyin M. Cekirge, **Ammar Elhassan**, Omar K. M. Ouda, "QUANTITATIVE RISK ASSESSMENT FOR CRUDE OIL PIPELINES", International Journal of Environmental Monitoring and Analysis, April 30, 2015 http://www.sciencepublishinggroup.com/j/ijema, Vol. 3, No. 3, 2015, pp. 147-153. doi: 10.11648/j.ijema.20150303.16
- 9 Huseyin M. Cekirge, Omar K. M. Ouda, **Ammar Elhassan**, "Economic Analysis of Solid Waste Treatment Plants Using Pyrolysis", American Journal of Energy Engineering. Vol. 3, No. 2, 2015, pp. 11-15. doi:10.11648/j.ajee.20150302.11, http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=168&
- 10 O. M. Khreis, **A. Elhassan**, "A coupled-mode theory analysis of intermixing in semiconductor distributed Bragg reflectors", Optical and Quantum Electronics Volume 45, Issue 9, pp 937-946 Springer US Print ISSN 0306-8919 Online ISSN 1572-817X, 2013
- 11 L. Alzubaidi L, **A. Elhassan** A, J. Al Ghazo, "Electrocardiogram based methodology for computing of Coronary Sinus Pressure", International Journal of Computer Science 2011, IJCSI 2011; ISSN: 1694-0814 Vol. 8, Issue 3, pp.382-386;

Conferences

- 1 Reham Saeed, Rawan Ghnemat, Ghassen Benbrahim, Ammar. Elhassan
- "Learning with Dynamic Architectures for Artificial Neural Networks Adaptive Batch Size Approach" *Accepted*

THE 2nd INTERNATIONAL CONFERENCE ON NEW TRENDS IN COMPUTING SCIENCES (ICTCS 2019), October 2019

2 - Islam Al Omari, Razan Al Omoush, Haneen Innab, Ammar Elhassan

"Visualizing Program Quality – A Topological Taxonomy of Features"

Accepted

THE 2nd INTERNATIONAL CONFERENCE ON NEW TRENDS IN COMPUTING SCIENCES (ICTCS 2019), October 2019

- 3 Raed Abu Zitar and **Ammar Elhassan** "Deep Learning Recommendation System for Courses Learning Outcomes Assessment", Innovation Arabia 12, HBMSU, Feb-2019, UAE
- 4 **A. Elhassan.**, L. Al Zubaidi, S. Al Huwaider (Student Research Project), "Scheduling with Divide and Conquer Genetics A Model and Implementation", The 19th International Conference on Artificial Intelligence, (ICAI'17: July 17-20, 2017, Las Vegas, USA) http://americancse.org/events/csce2017/conferences/icai17
- 5 **A. Elhassan** & W.S. Elhassan. "Assessment instruments for accreditation: A data management system design & implementation", IEEE International Conference on Communication, Management and Information Technology ICCMIT, Warsaw, Poland. *Accepted* February 2017.
- 6 I. Jenhani, G. Ben Brahim, **A. Elhassan**. "Course Learning Outcome Performance Improvement: A Remedial Action Classification Based Approach", 2016 15th IEEE International Conference on Machine Learning and Applications, Dec 18, 2016 Dec 20, 2016, Los Angeles, USA October 2016
- 7 **A. Elhassan**, R. Sinno, Z. Huneiti and S. Ahmed. "Assessing Functions and Competencies: A Model and System Implementation" 2015 IEEE 7th International Conference on Engineering Education (ICEED), Kanazawa, 2015, pp. 59-63. doi:10.1109/ICEED.2015.7451493 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7451493&isnumber=7451473
- 8 -Prince Sultan bin AbdelAziz College for the Blind A New Technology Driven Vision **A. Elhassan,** 2nd Int. Conference on ICT: Serving Disabilities and Learning Difficulties (ICDD2014) 19-21 May 2014 State of Kuwait http://www.redsoft.org/icdd2014/panel.html
- 9 **A. Elhassan**, "Greening Education: An Example from Saudi Arabia", EOSD International Greening Event Karlsruhe Germany November 2013, http://eosd.org/en/igee2013/welcome.html
- 10- **A. Elhassan**, "Graph-Coloring for Course Scheduling to Time-Room Sots A Comparative Analysis Based on Course Selection Order", The Third International Conference on e-Technologies and Networks for Development (ICeND2014), Lebanese University Beirut, April 29, to May 1 2014
- 11 Y Ansari, **A Elhassan**, A S. A Kazim. "Predictive Data Mining and Pattern Recognition in the Medical Sector: Implementation and Experience", WCCAIS'2014 IEEE World Congress On Computer Applications and Information Systems, 17-19 Jan 2014, Tunisia
- 12 L Alzubaidi, **A Elhassan**, J Alghazo, "Enhancing Computer Accessibility for Disabled Users A Kinect Based Approach for Users with Motor Skills Disorder", IEEE NOORIC 1435/2013 Taibah University International Conference on Advances in Information Technology for the Holy Quran and Its Sciences

- 13 L. Alzubaidi L, **A. Elhassan**, "Data Structures Learning A Visually Assisted Approach", International Conference on Computer Graphics & Virtual Reality CGVR'13 conference (Las Vegas) Las Vegas July 22-25 '13
- 14 L. Alzubaidi L., **A. Elhassan**, J. Alghazo, "Enhancing Computer Accessibility for Disabled Users A Kinect Based Approach for Users with Motor Skills Disorder", IEEE International Conference on Advances in Information Technology for the Holy Quran and Its Sciences, 19-22 Safar 1435 Hijri (22-25 December 2013) Taybah University, Al-Madinah Al-Munawwarah, Saudi Arabia
- 15 L. Alzubaidi, **A. Elhassan**, J. Al Ghazo. "Automatic Service and Protection Path Computation A Multiplexing Approach" The 2012 International Conference on Internet Computing (ICOMP 2012), Las Vegas July 16-19 '12
- 16 **A. Elhassan**, L. Alzubaidi and J. Al Ghazo. "Modeling and Synthesis of Human Insulin Secretion Mechanism Using CAD", Proceedings of The International Multi-Conference of Engineers and Computer Scientists 2012 (IMECS 2012), pp117-122 Conference proceeding published by IAENG
- 17 L. Alzubaidi L, **A. Elhassan**, J. Al Ghazo. "Computation of Coronary Sinus Pressure Using Pattern Recognition Techniques", International Conference on Bioinformatics and Computational Biology BIOCOMP 2011 Las Vegas

Book Chapters

Human Bio Functions as FPGAs Chip Design - An Insulin Perspective

A. Elhassan, L. Alzubaidi L. and J. Al Ghazo

IAENG Transactions on Electrical Engineering, Volume 1

Special Issue of the International MultiConference of Engineers and Computer Scientists 2012 Hong Kong, 14 – 16 March 2012, Edited by:

Sio-Iong Ao (International Association of Engineers, Hong Kong), Alan Hoi-shou Chan (City University of Hong Kong, Hong Kong), Hideki Katagiri (Hiroshima University, Japan), Li Xu (Zhejiang University, China) World Scientific ISBN 978-981-4439-07-7, pp.288-300

Funded Research

Intelligent Deep Learning Recommendation System Based on ADAMS's Course Learning Outcomes Assessment, internal research grant at Ajman University, 2018. PI: Prof. Raed Abu Zitar CI #1: Dr. A. Elhassan

Teaching the Holy Quran to Disabled Users. This is a research project funded by Taibah University "Noor Foundation" for Quran and Hadith studies. The main aim of this project is to design a suite of Hands-free Kinect Applications for educational purposes that allow users with disabilities to use a PC for learning the Holy Quran. This tool will support a hands-free operation mode for use by handicapped users. One year grant of SAR200k.

TEACHING

Technology

- Excellent familiarity with Rubrics design and implementation for Outcome based education, QA and Accreditation requirements.
- Design and deployment of Rubrics in LMS systems like Blackboard with analytics reporting
- Banner system familiarity in addition to numerous bespoke systems designed or used in KSA, UAE and Jordan

Subjects

- **Programing**: C, C++, C#
- Data Engineering & Visualization for Data Scientists with Excel, Oracle, Python, R & PowerBI
- **ERP** (SAP) Principle of enterprise resource planning with SAP as a reference package.
- Database Systems With exposure to the practical elements: SQL and Oracle
- **Software Engineering** With UML implementation
- **Discrete Maths** Including propositional and predicate calculus, sets and functions, mathematical reasoning, recursion and relations.
- Human Computer Interaction Covers the design of interactive products/systems
- **Project Management** From a software engineering perspective, with a focus on software design and implementation, and software development project management.

Other - Coordination and Supervision

- Senior Design /Capstone/Assessment III
- Coop/Internship