



جامعة العلوم والتقنية في الفجيرة
UNIVERSITY OF SCIENCE & TECHNOLOGY OF FUJAIRAH

CURRICULUM VITAE

PERSONAL INFORMATION

Name	Mulhim Al Doori
Nationality	British
Job Title	Professor & Dean
Marital Status	Married
College	College of Engineering and Technology
Department	
Date of Birth	29/07/1959
Mobile Number	+971 507549151
E-mail:	maldoori@gmail.com

EDUCATIONAL BACKGROUND

1. Doctorate

Degree	PhD
Field	Artificial Intelligence
University	Edinburgh University
Country	United Kingdom
City	Edinburgh
Graduation year	1995

2. Master

Degree	MSc
Field	Management Science
University	Hull University-Business School
Country	United Kingdom
City	Hull
Graduation year	1989

3. Postgraduate

Degree	Postgraduate Diploma
Field	Operational Research
University	Strathclyde University
Country	United Kingdom
City	Glasgow
Graduation year	1986

4. Bachelor

Degree	BSc
Field	Computing Science
University	Heriot Watt University
Country	United Kingdom
City	Edinburg
Graduation year	1985

5. Diploma

Degree	SHND
Field	Computer Data Processing
University	Heriot Watt University

Country	United Kingdom
City	Edinburg
Graduation year	1983

COMPUTER SKILLS

MS Word	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Excel	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Power Point	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Outlook	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Internet	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

LANGUAGE SKILLS

Arabic	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
English	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
French	<input checked="" type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Advanced
Spanish	<input checked="" type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Advanced

PROFESSIONAL EXPERIENCE

From (year)	To (year)	Position	Employer	Country
2023	Present	Professor & Dean	College of Engineering and Technology, University of Science and Technology of Fujairah (USTF)	U.A. E
2022	2023	Chief Specialist in Artificial intelligence & Big Data	CEO's Office, Roads & Transport Authority, Dubai	U.A. E
2019	2022	Professor of Artificial Intelligence & Dean	College of Information Technology, University of Fujairah	U.A.E
2000	2019	Professor of Computer Science	American University in Dubai	U.A. E
1997	2000	Assistant Professor	Department of Computing Science, Al-Albayt University	Jordan
1995	1997	Senior Systems Analyst	Axiom Business Computers Ltd.	Glasgow, Scotland
1996	1996	Consultant	Expert - Net Inc. Mill-Valley	California, USA
1993	1995	Consultant (Database Designer)	Dept. of Obstetrics & Gynecology, University of Leicester	United Kingdom
1991	1993	Lecturer	Dept. of Business Studies, Edinburgh University	United Kingdom
1990	1992	Part – Time Lecturer	Bell College of Technology (University of West Scotland)	Hamilton – Scotland, UK

EDUCATIONAL EXPERIENCE

Academic Year	Course Title	Academic Year	Course Title
1980/1983	SHND in Computer Data Processing: The 1980's SHND program covered fundamental aspects of computer data processing. It included computer hardware basics, programming languages like COBOL and FORTRAN, data processing techniques such as	1983/1985	BSc. Computing Science: I learned computer architecture, programming languages like COBOL and FORTRAN, and software development practices. The curriculum covered data structures, operating systems, and early

	<p>batch processing, and early database concepts. Students also learned about data communication protocols and software development tools of the era. Operating systems like IBM's OS/360 and DEC's VMS were studied. Practical projects were part of the curriculum to apply knowledge. The program emphasized the role of computers in business applications, including payroll and financial analysis.</p>
<p>1985/1986 Post-graduate studies: My dissertation project focused on creating a stock market forecasting system using Time Series Programming (TSP) on the VAX VMS platform. TSP is a method for analyzing time-series data, making it suitable for predicting stock market trends. The use of VAX VMS, a robust operating system, ensured stability and efficient processing.</p> <p>In addition to the forecasting system, the project involved developing FORTRAN procedures for graphics design. This indicates the incorporation of graphical visualization, a crucial aspect of stock market analysis and data presentation.</p> <p>By combining TSP on VAX VMS and FORTRAN for graphics, the project aimed to provide a comprehensive solution for stock market prediction, analysis, and visualization, catering to the needs of financial analysts and investors.</p>	<p>1987/1989 M.Sc. degree: My research focused on creating a data-driven expert system for stock market forecasting. It heavily utilized statistical methods. The primary programming language employed was C++, known for its efficiency and versatility in handling large datasets and complex algorithms. Additionally, versions of the system were developed in PROLOG, CLOS (Common Lisp Object System), and LISP (List Processing), highlighting the versatility of these languages in artificial intelligence and expert system development.</p> <p>In essence, this research aimed to harness statistical analysis and artificial intelligence techniques through various programming languages to build a robust expert system capable of making informed stock market predictions based on historical data and patterns</p>
<p>1991/1995 Doctoral Studies: My research endeavor centered on the creation of an intelligent object-oriented analysis environment known as "ARDA," which was complemented by an expert system tailored for reliability data analysis. This comprehensive system aimed to provide advanced capabilities for analyzing and interpreting reliability-related data.</p> <p>To achieve this, an expert system was meticulously developed using APL2, a programming language known for its mathematical and statistical prowess. APL2's capabilities were harnessed to implement the core logic and inference mechanisms of the expert system.</p>	

In addition to the expert system, my research encompassed various crucial components. The front-end interface, encompassing data entry, retrieval, graphical visualization, and reporting functionalities, was meticulously crafted in C++. This choice of language, renowned for its efficiency and versatility, ensured a user-friendly and robust user interface.

Furthermore, my research included a comparative analysis aspect. An alternative version of the system's inference engine was developed in SMALLTALK, allowing for a performance evaluation against the APL2-based inference system. This comparative study likely provided valuable insights into the strengths and weaknesses of different programming paradigms and languages in the context of reliability data analysis.

In summary, my research effort culminated in the creation of ARDA, an intelligent, object-oriented analysis environment with a multifaceted architecture, and the utilization of APL2, C++, and SMALLTALK reflected a thoughtful selection of tools and languages to enhance the system's functionality and performance.

PUBLICATIONS

1. Books

Jan 2016 "3D Geoinformation Science", Martin Breunig, Mulhim Al-Doori, Edgar Butwillowski. Paul V. Kuper, Joachim Benner, Kar Heinz Haefe3le. ISSN 1863-2246, ISBN 978-3-319-12181-9, DOI 10.1007/078-3-319-12181-9

Sep 2015 "Fundamentals of Geoinformation Science ", Chapter 6 Geometric Analysis & Chapter 7 Topological Analysis, Book Title: Co Author Prof. Martin Brunig. Kit Germany, Springer

2. Book Chapters: None

3. Journal Articles

1. Geospatial Data Management Research: Progress and Future Directions. ISPRS Int. J. Geo Inf. 9(2): 95 (2020)
2. V. Pangracious, M. Al Doori, "Novel Three Dimensional Embedded FPGA Technology and Architecture", ACM Sigarch Journal of Computer Architecture News, Hong Kong, Jan 2017
3. M. Jahn, M. Breunig, E. Butwilowski, P.V. Kuper, A. Thomsen, M. Al-Doori, E. Schill. "Temporal and Spatial Database Support for Geothermal Sub-surface Applications." Advances in 3D Geofomation, Lecture Notes in Geoformation and Cartography, Springer, Heidelberg, 337-356, 2016
4. Martin Breunig a , André Borrman b, Ernst Rank c, Stefan Hinz b, Thomas Kolbe e, Matthäus Schilcher e, Ralf-Peter Mundani c, Javier Ramos Jubierre c, Matthias Flurl c, Andreas Thomsen a, Andreas Donaubauer e, Yang Ji c, Steffen Urbanb, Simon Laun a,* , Simon Vilgertshofer d, Bruno Willenborg e, Mathias Menninghaus a, Horst Steuer e, Sven Wursthornb, Jens Leitloffb, Mulhim Al-Doori, Nima Mazroobsemnani a " Collaborative multi-Scale 3D City and infrastructure

modeling and simulation". *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-4-W4, 341-352, <https://doi.org/10.5194/isprs-archives-XLII-4-W4-341-2017>

5. M.W. Jahn, P.E. Bradley. M. Al-Doori, M Breunig, "Topologically consistent models for efficient big geo-spatio-temporal data distribution", *ISPRS Annals of Photogrammetry =, Remote Sensing and Spatial Information Sciences*, volume IV-4/W5, 2017

6. M. Breunig, P.V. Kuper, E. Butwilowski, A. Thomsen, M. Jahn, A. Dittrich, M. Al-Doori, D. Golovko, M. Menninghaus. "The Story of DB4GeO - A Service-Based Geodatabase Architecture to Support Multi-Dimensional Data Analysis and Visualization." In: *ISPRS Journal*, Vo. 1117, 187-205, 2016.

7. S. Laun, N. Rösch, M. Breunig, M. Al Doori. „Implementation of Kriging Methods in Mobile GIS to Estimate Damage to Buildings in Crisis Scenarios". *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLI-B2, 211-216, doi:10.5194/isprs-archives-XLI-B2-211-2016, 2016.

8. P.V. Kuper, M. Breunig, M. Al-Doori, A. Thomsen. "Application of 3D Spatio- Temporal Data Modeling, Management, and Analysis in DB4GeO", *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume IV-2/W1, 163-170, 2016.

9. M. BREUNIG, M. AL-DOORI, E. BUTWILOWSKI, P.V. KUPER, J. BENNER, K.H. HAEFELE, (EDS.). "3D Geoinformation Science - The Selected Papers of the 3D GeoInfo 2014". *Lecture Notes in Geoinformation and Cartography*, Springer, 258p., 2015.

10. E. BUTWILOWSKI, A. THOMSEN, M. BREUNIG, P.V. KUPER, M. AL-DOORI. "Modeling and Managing Topology for 3-D Track Planning Applications". In: M. Breunig, M. Al-Doori, E. Butwilowski, P.V. Kuper, J. Benner, K.H. Haeefe (Eds.) *3D Geoinformation Science - The Selected Papers of the 3D GeoInfo 2014*, *Lecture Notes in Geoinformation and Cartography*, Springer, 37-53, 2015

11. Mulhim Al-Doori, Bassam Betrouti, "Algorithm Comparison in Credit Scoring", *IJCSNS, International Journal of Computer and Network Security*, March 2014

12. M. Breunig, P. V. Kuper, A. Dittrich, P. Wild, E. Butwilowski, M. Al- Doori. "Design, Implementation and Applications of 3D Web-Services in DB4GeO". *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, II-2/W1 (2013), 87- 94, 2013.

13. Mulhim Al-Doori, Jamal Dab, "Intelligent School Management System", *International Journal of Intelligent Information Processing (IJIIIP)*, ISSN: 2233- 9426, 2012

14. Mulhim Al-Doori, Reem Al Suwaidi, Sherif Jaffar, " Customer Data Validation: A practical approach", *JNIT (Int'l Journal of Korea) Journal of Next Generation Information Technology*, ISSN: 2233-9388, 2012

15. Mulhim Al- Doori, Amr Jaber Ahmad, "Intelligent Equivalency System (IES) a Practical Approach", *Journal of Selected Areas in Software Engineering (JSSE)*, *The Canadian-based Cyber Journals*, (ISSN: 1925- 2676),2012

16. Mulhim Al-Doori, Rasha Sharif, "Adu Barcode Scanner Mobile Application", *Neural Information Processing: 19th International Conference*, Springer, 2012

17. Prof. John Cleland, Mulhim Al-Doori, TEN-HMS Study Demonstrates Clinical and Financial Efficacy of Home Tele-monitoring", *Hull University, working paper series. Paper No 344*, 2009

18. Mulhim Al-Doori, "Using analysis of variance to recognize repetitive patterns in process control charts", 2nd IEEE-GCC 2004 "Advancing Technology in the GCC: Challenges, and Solutions" *Gulf International Convention and Exhibition Centre Manama, Kingdom of Bahrain*, 2004

19. Mulhim Al-Doori, Jake Ansell, Thomas Archibald and L Thomas, "Importance of assessing effectiveness of repair in obtaining an optimal maintenance strategy for repairable assets". *The University of Edinburgh, Edinburgh, Scotland, UK. Lyn Thomas , Probabilistic Safety Assessment and Management*, Editors C. Spitzer, U. Schmoozer and V.N. Dang, Vol4, 2821-2826. , 2004

20. Mulhim Al-Doori, TW Archibald and J.I. Ansell, "An Intelligent Environment to test the stability of an optimal maintenance strategy for repairable assets", *The University of Edinburgh, Reliability Engineering and Safety Systems*, *Edinburgh University Press*, 2004

21. Mulhim Al-DOORI, " Progress Manager, an Object Oriented Case Management System in Delphi II", *Delphi Developers Journal*, vol 3, no. 12, 1997

22. "APL2 Verses SMALLTALK, C++ and CLOS", Mulhim Al-Doori, *APL Quote Quad*, Volume 25, Number 3, 1994

23. "ARDA - Expert System for reliability data analysis", Mulhim AL-Doori, J I Ansell. *APL Quote Quad*, Volume 24, Number 1, 1992

24. Mulhim Al-Doori, "A volume for the reliability shelf - Reliability DATA ANALYSIS", *British APL ASSOCIATION Journal (Vector)*, Volume 9, Number2, 1992

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25. Mulhim Al-DOORI, "A review of Glimpse", PROFESSIONAL Statistician Journal, Volume 9, Issue 10, pp21- 33, , 1989
 26. "Towards an expert system", Mulhim Al-Doori, J I. Ansell. APL - ICATION CONFERENCE proceedings. BCS, KENT, pp 65 – 72, 1988
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3. Conferences

1. Mukhtar, B., Al-Doori M., "Geographic Information System for Real-time Efficient Management of services and Resources at Vehicular Internet of Things", ISPRD Archives, Niece 2021
 2. Al-Doori M., Kuper P.V., Breunig M., and Mazroob N. (2018) "TOWARDS AN INTELLIGENT PLATFORM FOR BIG 3D GEOSPATIAL DATA MANAGEMENT", 3DGeoInfo2018, Melbourne University, Melbourne, Australia.
 3. Breunig, M Al-Doori. "Requirements for the Modeling and Management of 3D Tracks and Perspectives for the Gulf Region", GIS and Remote Sensing Annual Scientific Forum, GRASF2017, Dubai Municipality, Dubai, UAE
 4. M. Al-Doori, "Empowering GIS and Remote Sensing Analysis with SPATIAL BIG Data", GIS and Remote Sensing Annual Scientific FORUM, GRASF2017, Dubai Municipality, Dubai, UAE
 5. Vinod PANGRACIOUS, Mulhim Al-Doori "Novel Three-Dimensional Embedded FPGA Technology and Architecture", HEART2017, International Symposium on Highly – Efficient Accelerators and Reconfigurable Technologies, Hong Kong, Jun 2017
 6. M. W. Jahna, P. E. Bradleyb, M. Al Doori, M. "Topologically consistent Spatio-temporal models for efficient data distribution of Big Geo-Spatial data used for parallel processing of Geo-Analysis and simulations". 3DGeoing2017 Melbourne, Australia.
 7. YK Al-Douri, V Pangracious, M Al-Doori, " Artificial Immune System Using Genetic Algorithm and Decision Tree", Bio-engineering for Smart Technologies (BioSMART), International Conference on Bio-Engineering for Smart Technologies (BioSMART 2016), The American University in Dubai, Dubai, U.A.E
 8. Vinod Pangracious and Mulhim Al-Doori, "Novel Three-Dimensional Embedded FPGA Technology And Architectures", The 7th ACM International Symposium on Highly-Efficient Accelerators and Reconfigurable Technologies (HEART-2016), Hong Kong July 25-27, 2016
 9. Mulhim Al-Doori, Martin Breunig, "Computer-Aided Collaborative Subway Track Planning in Multi-Scale 3D City and Building Models", MEGF, GRASF2016, GIS and Remote Sensing Annual Scientific Forum Dubai, U.A.E
 10. M. Breunig, M. Al-Doori. "3D Geoinformation Science: State of the Art and Perspectives for the Gulf Region." Middle East Geospatial Forum, Proc. GRASF 2015 Conference, Dubai, abstract, 2015.
 11. Mulhim Al-Doori, "Big Data and point cloud management", Keynote Paper, GRASF-MEGF2015, Middle East Geospatial Forum, Dubai, UAE 2015.
 12. artin Breunig, Mulhim Al-Doori, "3DGeoinformation Science: State of the art and perspectives for the gulf region", GRASF Plenary, GRASF-MEGF2015, Middle East Geospatial Forum, Dubai, UAE 2015.
 13. Martin Breunig, Paul Kuper, Edgar Butwilowski, Mulhim Al-Doori, "Mobile spatial data acquisition with GeoTechMobile, GRASF-GI Science, GRASF- MEGF2015, Middle East Geospatial Forum, Dubai, UAE 2015.
 14. Mulhim Al-Doori, Paul Kuper, Martin Breunig, Edgar Butwilowski, "The effective handling of Geospatial and time-dependent data in the geodatabase DB4GEO, GRASF – Spatial Government, GRASF-GI Science, GRASF- MEGF2015, Middle East Geospatial Forum, Dubai, UAE 2015.
 15. Butwilowski, E., A. Thomsen, M. Breunig, P. V. Kuper, and M. Al-Doori. 2015. "Modeling and Managing Topology for 3-D Track Planning Applications." In 3D Geoinformation Science: The Selected Papers of the 3D GeoInfo 2014, Lecture Notes in Geoinformation and Cartography, Heidelberg: Springer, 37-55, 2015.
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PROFESSIONAL AND ACADEMIC ACTIVITIES

1. Professional Training

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- POSTGIS Databases, Karlsruhe Institute of Technology, Germany 2016
 - ORACLE Database Administration, The American University in Dubai, 2012
 - ORACLE Cloud Computing, ORACLE 2015
 - Java & J2EE programming, The American University in Dubai 2012
-

2. Workshops: The following workshops were delivered by me to Phd Students at Karlsruhe Institute of technology, Germany

- Matlab and its Applications in Geoinformatics & Computational Intelligence, 9 May 2028
 - R - Technical Short Course, 2017
 - Matlab - Technical Short Course, 2016
 - Matlab, 2015
 - Matlab, 2014
-

3. Master Theses Supervision

- Supervision of 11 MSc. thesis in Artificial Intelligence (1997 – 1999)
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4. Doctorate Theses Supervision

Karlsruhe Institute of Technology (KIT) University, Germany**Geodetic Institute***Co-Supervision of five PhD students:*

- Mr. Edgar Butwillowski – the research is on 3D Data Model Management for Geosciences with Particular Emphasis on Topology and Time. Successfully finished in May 2015
 - Mr. Paul V. Kubar working on 3D/4D Data and Model Management for the Geosciences. Successfully finished in July 2016
 - Mr. Simon Laun – “Implementation of Kriging Methods in Mobile GIS to Estimate damage to buildings in crisis scenarios. – Expected to finish May 2018
 - Mr. Markus Jahn – “Simulation services for spatio-temporal database systems, – Expected to finish October 2020
 - Mr. Hussein Abdulmuttalib – “Mobil GIS Applications in Smart Cities, – Expected to finish 2021.
 - Ms. Mai Faroukiddin – “Reliability Analysis of Big Geospatial Data”, Expected to finish 2021
-

MEMBERSHIP OF PERIODICALS AND SCIENTIFIC JOURNALS

- Vice Chairman of BCS the Chartered Institute for IT, Middle East and Africa’s section
 - Member of IEEE since 2000/UAE
 - Fellow Member of the British Computing Society / Glasgow since 1986
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AWARDS

- President’s award - Constitutional effectiveness, April 2012
 - President’s award – Best Faculty Member Teaching award, April 2013
 - Provost award - Outstanding research record, April 2014
 - Provost award - Outstanding research record, April 2015
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