

Prof. Dhiya Al-Jumeily OBE

Professor of Artificial Intelligence/ Senior Member IEEE
PhD, MPhil, MSc, BSc, PGCHE, CITP, FHEA

A. PERSONAL INFORMATION

A.1. CONTACT DETAIL

Name: Prof. Dhiya Al-Jumeily OBE
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Email: d.aljumeily@ljmu.ac.uk
Publication: <https://symplectic.ljmu.ac.uk/login.html>
ORCID: [0000-0002-9170-0568](https://orcid.org/0000-0002-9170-0568), *H index 37 (Scholar), 23 (Scopus), 2822 citations since 2017*

A.3. EXTERNAL PROFILES

Google Scholar: <https://scholar.google.com/citations?pli=1&authuser=1&user=iiQg728AAAJ>
Scopus: <https://www.scopus.com/authid/detail.uri?authorId=23090210900>
ORCID: <https://orcid.org/0000-0002-9170-0568>
dblp: <https://dblp.uni-trier.de/pid/59/6775.html>
Research Gate: <https://www.researchgate.net/profile/Dhiya-Al-Jumeily>

A.2. HIGHLIGHTS

Research outcome	Published 300+ peer reviewed international publications including 102 journal articles, 191 conference papers/proceedings, written/Edited 17 Books and 17 book chapters alongside other publications (reports).
Research funding Secured	Over £7.5M
Supervision experience	25+ PhD successful supervision
Awards/Prizes	On the 31 st of December 2020, professor Dhiya Al-Jumeily was promoted and appointed by THE QUEEN to the Most Excellent Order of the British Empire, "OBE- Officer of the Most Excellent Order for the "Services to Scientific Research"- https://www.thegazette.co.uk/notice/3703557 .
Professional activities	Delivered 50+ keynote speeches
Patents	Image Edge Direction and Orientation Detecting Method, Pub. No. (WO/2008/119939), International Filing Date (26.03.2008), IPC (H04N 7/26), G06T 5/00 (2006.01).
Professional Body	Senior Member of IEEE , the Institute of Electrical and Electronics Engineers, Since 2016, USA.

A.4. PROFILE

Prof Dhiya Al-Jumeily OBE, (DA) is a professor of artificial intelligence (AI) at Liverpool John Moores University with 30+ experience in the field of AI and its applications in fulfilling the United Nations Sustainable Development Goals (UNSDGs). DA's research is focused on using AI alongside technological tools for improving the world and making it a better place for everyone everywhere. This has been featured in the advancement he has made in the field of healthcare, environment, safety and security, and education at a global level. Though based in the UK, DA has been collaborating with researchers from 20+ countries with a special focus on improving the situation in developing countries e.g. the MENA region.

With roots based in Iraq, DA has embraced the knowledge he had gained in childhood that served as the basis of AI knowledge; where, algorithms were first invented at the House of Wisdom in Baghdad. DA has excelled in the field of AI and machine learning where he has published so far 500+ publications including peer reviewed articles, book/ book chapters, conference proceedings, and technical reports.

Yet the benefits to the scientific audience were not limited to publications; but encompassed global scholarly activities through facilitating the exchange of knowledge among scientists, practitioners and regulatory organisations. Thus, DA is the founder and president of the eSystem Engineering Society (eSES), a non-profit organisation which mission comprises the development and advancement of technology for the benefits of humans. Since 2007, eSES hosts the IEEE International Conference on Developments in eSystems Engineering (DeSE) that is attended by 200+ attendees from 25+ countries. DeSE has led to multiple collaborations and opportunities related to AI and smart applications for the benefits of the people.

DA is a research leader and has supervised 25+ PhD students and mentored 20+ academics during his careers. DA's mentees have successful careers not only in academia but also in different industries and regulatory organisations focusing on real-world applications of AI. Example of these applications include intelligent environmental sensors that monitor air and water quality for pollutants. Other applications include intelligent healthcare applications that enable intelligent diagnosis-, patient's management-, intervention-based applications that are used in Europe and the Middle East. DA's research has been acknowledged and funded by key international funding bodies that contributed to £7.5m+ worth of projects via academic, industrial and knowledge transfer routes.

DA's work has been awarded in the UK and internationally. On the 31st of December 2020, professor Dhiya Al-Jumeily was promoted and appointed by THE QUEEN to the Most Excellent Order of the British Empire, "OBE- Officers of the Civil Division of the said Most Excellent Order for the "Services to Scientific Research"- <https://www.thegazette.co.uk/notice/3703557>. Moreover in 2022, DA has been classified as one of the top 30 most influential Arabs in technology and AI: <https://technologyreview.ae/ai-person/>.

A.5. ACADEMIC QUALIFICATIONS

- **Ph.D.** in Artificial Intelligence – PhD Thesis: "Intelligent Algorithms and Software for Computer-Aided Assessment in Mathematics", Liverpool John Moores University, Liverpool, UK, 2000.
- **MPhil** in Software Engineering, Liverpool John Moores University, "Parallel Computation Development to improve performance", 1995.
- **MSc** in Software Engineering, "Object oriented approach in software development", The University of Liverpool, Liverpool, UK, 1992.
- **BSc** in Software Engineering, the University of Liverpool, 1991.
- **BSc** in Mathematics, Baghdad University, 1988.

A.6. TEACHING AND LEADERSHIP QUALIFICATIONS

- **Strategic Executive** Development Programme for Diverse Leaders in HE, accredited by iLM, May 2015.
- **Diverse Leaders programme** StellarHE strategic executive development in Higher, The diversity practice (diversitypractice.co.uk), 2014.
- **PGCHE** Postgraduate Certificate in Teaching & Learning in HE (SEDA accredited), LJMU, 1997.

A.7. OTHER QUALIFICATIONS & CPDs

- **Diversity in the workplace**, Liverpool John Moores University (LJMU), UK, 2014.
- **Data Protection**, Liverpool John Moores University (LJMU), UK, 2014.
- **Bribery Act**, Liverpool John Moores University (LJMU), UK, 2014.

A.8. PROFESSIONAL BODIES RECOGNITION

- **Charter IT Professional (CITP)**, British Computer Society (BCS), Since 2014, UK.
- **Fellow of Higher Education Academy (FHEA)**, Higher Education Academy, Since 2014, UK.
- **Senior Member of IEEE**, the Institute of Electrical and Electronics Engineers, Since 2016, USA.
- **Member of the Council of Professors and Heads of Computing**, Since 2016, UK.
- **Founding member of the International Society of Health Education**, Since 2020, USA.

A.9. MAIN AREA OF RESEARCH

- Applied Artificial Intelligence and Machine Learning
- Digital Health, Smart Cities and Industry 4.0 applications of Computer Science and Engineering

A.10. MAIN AREA OF TEACHING

- Intelligent Systems and Machine Learning
- Advanced Databases and Data Sciences
- Advanced Software Engineering

B. CURRENT & PREVIOUS POSITIONS AND APPOINTMENTS

B.1 CURRENT ACADEMIC AND MANAGEMENT POSTS

B.1.1 Current Academic and Management Positions

- **External Examiner**, University of Malta for the BSc Programme in Business and IT, (2022–2026), Malta.
- **External Examiner**, University of Buckingham for the MSc in Applied Computing, and the MSc in Applied Data Science, (2021–2025), UK.
- **Professor of Artificial Intelligence**, Faculty of Engineering and Technology, LJMU, (2017-Present), UK.
- **Visiting Professor**, Graduate School at UNITAR, Kelana Jaya, (2021-Present), Malaysia.
- **Visiting Professor**, Kazan Federal, (2016-Present), Russia.
- **Visiting Professor**, Supélec University, Paris, (2014-Present), France.
- **Visiting Professor**, the University of Babylon, (2014-Present), Iraq.
- **Visiting Professor**, the University of Anbar, (2004-Present), Iraq.

B.1.2 Current Enterprise, Research and Leadership Positions

- **Founder and General Chair of** the International Conference Series on Developments in eSystems Engineering (dese.org.uk), Technical Sponsor - IEEE, since 2007.
- **President of eSystem Engineering Society**, Chartable organisation, since 2017.
- **Currently Supervising 7 PhD Students** (3 as DoS).

B.2 PREVIOUS ACADEMIC AND MANAGEMENT POSTS

B.2.1 Academics & Leadership

- **Associate Dean (External Engagement)**, Faculty of Engineering and Technology, LJMU, UK, (Sep 2015-Oct 2018).
- **Principal Lecturer**, Department of Computer Science, LJMU, UK, (2006–2017).
- **Senior Lecturer**, LJMU, UK, (2000–2006).
- **Lecturer**, LJMU, UK, (1997–2000).
- **Assistant Lecturer**, Baghdad University, Iraq, (1987-1990).

B.2.2 Management

- **Programme Leader** for Online MSc Courses in Computing, LJMU, UK, (2009–2015).
- **Programme Leader** for Online BSc Courses in Computing, LJMU, UK, (2007–2014).
- **Programme Leader**, B.Sc. Multimedia Systems Degree, LJMU, UK, (2000–2009).
- **Level Tutor**, B.Sc. Software Engineering Degree, LJMU, UK, (1997–2000).

B.2.3 External Academic Duties

- **External Examiner**, Salford University for the Foundation Program, (ongoing since 2022).
- **External Examiner**, Nottingham Trent University, (ongoing since 2022).
- **External Examiner**, University of Malta for the BSc (Hons) in Business and IT, Malta, (2014–2017).
- **External Examiner**, Coventry University for the franchise arrangement of BSc (Hons) Computing and BSc (Hons) Computer Science) at INTI International College (Penang and Subang Jaya Campuses), Malaysia, (2014–2015).
- **External Examiner**, University of Bedfordshire for the following franchise arrangement (2010-2014).
 - Preston University (BSc (Hons) Information Technology), in Ajman, UAE.

- **External Examiner, University of Wales**, for the following collaborative programmes (2012–2014):
 - Modern University for Technology and Information (BSc in Electrical Engineering), Cairo, Egypt.
 - Escuela Superior Internacional (BEng in Internet Engineering), Murcia, Spain.
- **Academic Advisory Board Member**, Computer College, Dubai, UAE, (2011–2014).
- **Quality Advisory Team Leader**, Al Khawarizmi University College, Abu Dhabi, UAE, (2004–2012).
- **Link Tutor**, BSc Computer Studies programme with Al Khawarizmi University College, UAE, (1998–2004).
- **Link Tutor**, BSc Computer Studies programme with Computer College, Dubai, UAE, (1998–2004).
- **External Examiner member of the Validation Committee**, MSc Computer Science, Staffordshire University, June 2009.

B.2.4 Enterprise and External Engagement

- **Head of Enterprise**, Faculty of Engineering and Technology, LJMU, UK, (2014–2016).
- **Head of Enterprise**, School of Computing and Mathematical Sciences, LJMU, UK, (2010–2014).
- **Enterprise Champion**, School of Computing and Mathematical Sciences, LJMU, UK, (2010–2012).

B.2.5 Collaboration

- **MSc Programmes with UpGrad**, India, (Since 2019)
- **Collaboration with Bahrain University**, Co-supervision of dissertations, (2018–2019).
- **Collaboration with USST (China)**, Summer school, (2018–2019).
- **Collaboration with DISTED (Malaysia)**, Franchise of Courses, (2018–2019)
- **Collaboration with Cheshire Constabulary**, Developing and Leading the First in the world accredited Joint MSc Programme in CCTV Forensic Analysis, (2010–2014).
- **Collaboration with Bahrain University**, Co-supervision of dissertations, (2018–2019).

B.2.6 Research and Leadership

- **Founder and Head of Applied Computing Research Group**, LJMU, UK, (2010–2016).
- **Deputy Head of the Software Distributed Research Group**, LJMU, UK, (2007–2010).

B.2.7 Honorary Positions

- **Member of the Local Management Committee**, NewMind Limited, Liverpool, UK (2015–2016).
- **Representing Liverpool JM University VC** in “Iraqi Higher Education Mission”, November 2013.
- **Member of the Local Management Committee**, ‘Matheson and Horn Associates’, KTP scheme, UK (2005–2007).
- **Member of the Local Management Committee**, ‘Micromark, Bredisco group, KTP scheme, UK, (2006–2008).
- **Member of the Local Management Committee**, ‘SCI Search & Selection, Cheshire, UK, (2002–2005).

B. RESEARCH ACTIVITIES

B.1. POSTGRADUATE SUPERVISION & EXAMINATION

B.1.1 Postgraduate Supervision Summary

PhD Student Supervising

Completions: 26
Current: 6

MPhil/MSc Student Supervising

Completions: 50+
Current: 2

Research Assistant/Associate

Previous: 13
Current: 2

B.1.2 Postgraduate Examination (PhD viva)

PhD Examination

External: 52 (PhD)

PhD International Examination

Viva: 24 (PhD)

PhD Ind. Chair Examination

Independent: 4 (PhD)

PhD Transfer

Internal: 20+ (PhD)

B.1.3 Visiting Professors that work under my leadership

The following is a list of Visiting professors that work under my leadership:

- **Prof. Maitham Ghaly Yousif**, Intelligent Patient Management System Project, Sep 2022-Sep 2023.
- **Prof. Mohammed Hashim Hasoun Al-Jefery**, Kidney transplantation and artificial kidney Project, June 2022 – November 2022.
- **Prof. Mohammed Al-Jumeily**, Detection of Chronic Lower Back Pain Project, June 2017 – Present.
- **Prof. De-Shuang Huang**, Advance Machine Learning approaches, Sep 2017- Present.

B.1.4 Research Assistants I Managed previously

The following is a list of research assistants and research fellows who worked under my supervision on externally funded projects.

- **Dr. Ahmed Kaky**, Data science and bioinformatics, 2017-2020.
- **Dr. Mohammed Mehoub**, KTP associate with Living Lens, Project entitled: The analysis of LivingLens data Using Data Science Approaches, April 2019 - 2021.
- **Dr. Ahmed Zia UL Saufie Mohamed Japeri**, Universiti Teknologi Mara (Malaysia), Project entitled: Modelling of Air Pollution using Statistical and machine learning approach, May 2019-Jan 2020.
- **Dr. Jade Hind**, KTP associate with Living Lens as Data scientist, Project entitled: The analysis of LivingLens data Using Data Science Approaches, Nov 2018 - 2020.
- **Mr. Egor Petrov**, Research assistant to support the programme entitled: Gamification to support functionality of minor languages, Oct 2017-Dec 2017.
- **Dr. Evgeniia Maklakova**, Research assistant to support the programme entitled: Innovation and technology in Education and Communication, Oct 2017-Dec 2017.
- **Mr. Carlos Mariscal**, KTP associate with New Mind Limited, Project entitled: The use of Data Analytics in the tourism, May 2016- 2017.
- **Dr. David Lamb**, Research assistant supporting the operation of online MSc programmes, Sep 2011-2014.
- **Mr. Ashraf Murtada**, KTP associate on the project entitled: Designing of Secure System, Sep 2008- Jan 2011.
- **Mr. Dan Williams**, Research assistant supporting the operation of online programmes, Sep 2007-2011.
- **Mr. Chris Kelly**, Research assistant supporting the operation of online programmes, Sep 2007-2011.
- **Dr. Jordan Kung**, Research assistant for the project entitled: Technology to support learning and teaching, Sep 2002-2004.

B.1.5 Research Assistants I currently supervise and manage

- **Dr. Manoj Jayabalan**, Research assistant supporting the operation of online programmes, 2019-present.
- **Dr. Ahmed Kaky**, Research assistant supporting the operation of online programmes, 2020-present.

B.1.6 PhD Successful Supervision

- **Dr. Shatha Ghareeb**, An Adaptable, Dynamic Quality Assurance Framework for Brand Franchising in Diverse Cultures, Completed June 2020.
- **Dr. Hiba Al-Smadi**, (DoS) PhD Research Area: Intelligent Approach to Improve Long-Term Follow-Up of Chronic Disease, Completed June 2021.
- **Dr. Mohamed Alloghani, (DoS)** PhD thesis entitled: An intelligent citizen-centric oriented model for e-governance: a UAE case study, completed May 2019.
- **Dr. Basma Abdulaimma**, PhD thesis entitled: High dimensional analysis of genetic data for the classification of type 2 diabetes using advanced machine learning algorithms, completed April 2019.
- **Dr. Jade Hind**, PhD thesis entitled: RASAR: a novel methodology for the detection of epistasis, completed November 2018.
- **Dr. Mohammed Ibrahim Khalaf**, PhD thesis entitled: Machine Learning Approaches and Web-Based System to the Application of Disease Modifying Therapy for Sickle Cell, completed September 2018.
- **Dr. Paul Ross McWhirter, (DoS)** PhD thesis entitled: An Automated Pipeline for Variability Detection and Classification for the Small Telescopes Installed at the Liverpool Telescope, completed October 2018.
- **Dr. Sarmad Abdulazeez**, PhD thesis entitled: Dynamic load balancing for massively multiplayer online games, Development of Peer-to-Peer MMOGs", completed December 2017.
- **Dr. Ahmed Kaky, (DoS)** PhD thesis entitled: Intelligent systems approach for classification and management of patients with headache 'Machine Learning for support personalised healthcare, completed August 2017.
- **Dr. Mohammed AlGhamdi, (DoS)** PhD thesis entitled: Supporting the learning of computer programming in an early years education, completed October 2016.
- **Dr. Abdunnaser Mrabet**, PhD thesis entitled: Factors Affecting Electronic Commerce Acceptance and Usage in Libyan ICT Organisations, completed April 2017.
- **Dr. Abdul Hakim Mohamed**, PhD thesis entitled: Patient-centred culturally aware design approach for e-Health acceptance, jointly supervised with Liverpool Hope University and Liverpool University, completed June 2016.
- **Dr. Rabea F Kurdi**, PhD thesis entitled: An investigation of readiness assessments for E-government information system and cloud computing using Saudi Arabia as a case study, completed Nov 2013.
- **Dr. Haya Alaskar**, PhD thesis entitled: Dynamic self-organised neural network inspired by the immune algorithm for financial time series prediction and medical data classification, April 2014.
- **Dr. Shamaila Iram, (DoS)** PhD thesis entitled: Early Detection of Neurodegenerative Diseases from Bio-Signals: A Machine Learning Approach, completed June 2014.
- **Dr Agustina Martínez-García**, PhD entitled thesis: Development of Self-Archiving Tools to Support Archiving, Analysis and Re-Use of Qualitative Data, completed August 2013.

- **Dr. Zaynab Anwer Ahmed**, PhD thesis entitled: Enhanced computation time for fast block matching algorithm, completed Oct 2013.
- **Dr. Mohamed Alzawi, (DoS)** PhD thesis entitled: The development of an adaptive environment (framework) to assist the teaching, learning and assessment of geography within the Omani secondary education system, completed Dec 2012.
- **Dr. Batoul Al Lawati, (DoS)** PhD Thesis: 'The effectiveness of applying game based-learning methods upon the education environment for Omani secondary classroom', Jun 2012.
- **Dr. Naeem Radi**, PhD Thesis: Hybrid predictive, wavelet and arithmetic (HPWA) still image coding system, completed May 2012.
- **Dr. Thar Baker**, PhD thesis entitled: Process of Programming Support for Autonomic Software Engineering, completed Jun 2010.
- **Dr. David Lamb, (DoS)** PhD thesis entitled: Developing a Global Observer Programming Model for Large-Scale Networks of Autonomic Systems, completed Jun 2009.
- **Dr. Rozaida Ghazali**, PhD thesis entitled: Higher order neural networks for financial time series prediction, completed Dec 2007.
- **Dr. Ali Al-Fayad**, PhD thesis entitled: Image Compression Using Improved Hybrid Classified Vector Quantiser and its application to Medical images, Apr 2008.
- **Dr. Jordan Pang Kung, (DoS)** PhD thesis entitled: Intelligent Algorithms for an Algebra Tutoring system, completed Dec 2002.

B.1.7 MPhil Successful Supervision

- **Mr. Glyn Hughes, (DoS)** MPhil thesis entitled: A Declarative Language Framework for Cloud Computing Management, June 2017.
- **Miss Asmaa Mahdi**, MPhil thesis entitled: Time Series Analysis of Networked Package Application Usage and Prediction, Mar 2010.
- **Mr. Shahzad Muhammad Tayyab**, MPhil thesis entitled: Design of a new non-blocking commit protocol, May 2009.

B.1.8 PhD Current Supervision

- **Mr. Abbas Alatrany**, PhD Research Area Genetic data analysis, Started 2020.
- **Mr. Mathew Harper**, PhD Research Area: Intelligent digital memory to support human memory for individuals with Dementia, Started 2019.
- **Mr. Kieran Latham**, PhD Research Area: Immersive and Embedded Technology for Endovascular Thrombectomy Training Platform, Started 2018.
- **Miss Sin Ying Tan, (DoS)** PhD Research Area: An Investigation into the Development of an Intelligent Framework to Support Behavioural Tracking and Analysis, Started 2017.
- **Mr. Osman Salih**, PhD Research Area: Smart Shunting and Monitoring of Hydrocephalus Patients, Started 2018.

B.1.9 PhD Current Supervision (as external for International Universities)

- **Universiti Teknologi Mara, Malaysia, Mr. Zuraira Binti Libasin**, PhD Research Area: Long Gaps Missing Values Imputation in Air Pollution Data Set Using Hybrid Method, Started Feb 2020.
- **University of Malta, Malta, Mr. Stephen Agius**, PhD Research Area: Healthcare systems to support decision, started July 2020.

B.1.10 MSc Students Supervision

Successfully supervising over 50 MSc project students in various technical areas (1999- Present).

B.1.11 PhD/Postgraduate External Examination Experience

- **Kuwait University**, PhD thesis entitled: A Smart Admission Control and Cache Replacement Approach in Content Delivery Networks, May 2022.
- **University of Buckingham**, MRes thesis entitled: Improving Video Compression by applying Physics Principles, March 2022.
- **University of Buckingham**, PhD thesis entitled: Measuring Confidence in Classification Decisions for Clinical Decision Support Systems: A Gaussian Bayes Optimisation Approach, February 2022.
- **University of Liverpool**, PhD thesis entitled: Artificial Intelligence Applied to Facial Image Analysis and Feature Measurement, December 2021.
- **University of Liverpool**, PhD thesis entitled: : Enhancing The Auditability of Agile-XP Software Development Process in the Context of EU Medical Device Regulations, November 2021.
- **Sheffield Hallam University**, PhD thesis entitled: Atrial Fibrillation Detection Service for Stroke Prevention, October 2021.

- **University of Buckingham**, MRes thesis entitled: DOSAN: Dynamic dataset generation from remote multiple streams for AI RNN based forecasting prediction, September 2021.
- **University of Northampton**, PhD thesis entitled: Microload Management in Generation Constrained Power Systems, September 2021.
- **University of Madras (India)**, PhD thesis entitled: Performance Analysis of Secure Hashing Algorithms Compared with Substitution Techniques for the Enhancement of Security in Cloud Environment, August 2021.
- **B.S. Rahman Crescent Institute of Science and Technology (India)**, PhD thesis entitled: A pragmatic approach towards automatic summarisation of Malayalam documents using clause identification and sentence framing method, August 2021.
- **Flinders University (Australia)**, PhD thesis entitled: Improving the performance of low-bandwidth communications networks for disaster zones and remote areas, July 2021.
- **DeMontfort University**, PhD thesis entitled: A context aware classification system for monitoring drivers' distraction levels, May 2021.
- **Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (Pakistan)**, PhD thesis entitled: User-centric small cell aided future cellular networks: sub-6ghz and hybrid millimeter wave communications, April 2021.
- **Kingston University**, PhD thesis entitled: Classic versus deep approaches to address computer vision challenges: A study of the problems of faint edge detection and multispectral image registration, March 2021.
- **Malaviya National Institute of Technology Jaipur (India)**, PhD thesis entitled: Cervical cancer detection using pap smear images by machine learning techniques, August 2020.
- **University Teknologi Mara (Malaysia)**, PhD thesis entitled: Enhancement of CommonKADS Assessment Task in Knowledge Modelling and Specification for Domain Expert Maintainable Knowledge-Based System, August 2020.
- **Deemed University (India)**, PhD thesis entitled: Efficient Classification and Soil Quantification using Hyperspectral Data, July 2020.
- **University of Buckingham**, PhD thesis entitled: Analysing and Enhancing the Security of EMV Contactless Cards, June 2020.
- **Amity University of Computational Sciences (India)**, PhD thesis entitled: Distributed network expansion planning under uncertainty in deregulated power system, May 2020.
- **Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (Pakistan)**, PhD thesis entitled: Interference Management in Next Generation Cellular Networks, April 2020.
- **Manchester Metropolitan University**, PhD thesis entitled: Enhanced Encryption and Fine-Grained Authorisation for Database Systems, February 2020.
- **University of Bradford**, PhD thesis entitled: 'Intelligent based Packet Scheduling for Multi-Service in Internet Protocol/Multi-protocol Label Switching (IP/MPLS) Networks', November 2019.
- **Anna University (India)**, PhD thesis entitled: Computer-aided detection and classification of masses in mammograms based on empirical mode decomposition, August 2019.
- **Anna University (India)**, PhD thesis entitled: "Multiple Particle Swarm Optimisation Selection Techniques for fMRI Classification of Schizophrenia Patients, July 2019.
- **University Teknologi Mara (Malaysia)**, PhD thesis entitled: Clinical Substitution Therapy based on Adaptive Neuro-Fuzzy Inference System and Semantic Causal Reasoning Models, February 2019.
- **University of Salford**, PhD thesis entitled: Binaural Sound Source Localisation using Machine Learning with Spiking Neural Networks Features Extraction, January 2019.
- **University of Northampton**, PhD thesis entitled: Developing a Data Mining Approach (SLDM) for Motion Wearable Sensors to Detect the Early Signs of Lameness in Sheep, November 2019.
- **University of Salford**, PhD thesis entitled: Machine Learning and Autonomous System for Human Gait analysis and Diseases Diagnosis, October 2019.
- **National Institute of Technology (India)**, PhD thesis entitled: Analysis and Modeling of Colour Image Compression for Multimedia Applications, September 2019.
- **Leeds Beckett University**, PhD thesis entitled: Investigating Pilot Responses to In-Flight Startle in Simulator Based General Aviation Training, November 2018.
- **University of Buckingham**, PhD thesis entitled: A Modular Approach to Identify Correct Clusters and Outliers in Data Streams, September 2018.
- **Universiti Putra (Malaysia)**, PhD thesis entitled: Temporal Video Segmentation using A Hybrid form of Krawtchouk-Tchebichef Moments, September 2018.
- **Bishop Heber College (India)**, PhD thesis entitled: Performance enhancement of clustering using data structures, September 2018.
- **The University of Liverpool**, PhD thesis entitled: Automatic Computer Vision Systems for Aquatic Research, August 2018.
- **University of Madras (India)**, PhD thesis entitled: Identification of brain tumour in MRI images using segmentation technique, July 2018.
- **University of Madras (India)**, PhD thesis entitled: An analysis and prediction of tumour in mammogram images using data mining techniques, April 2018.

- **Asia e University (Malaysia)**, PhD thesis entitled: New Data-Driven Approaches to Automatic Hint Generation in a Code-Writing Intelligent Tutoring System for C Programming, October 2017.
- **University of Salford**, PhD thesis entitled: Robust Speaker Recognition in Presence of Non-Trivial Environmental Noise, September 2017.
- **Nottingham Trent University**, PhD thesis entitled: Automated Detection of Covert Channels in IPv6 and mitigation the security threats in Network Protocol TCP/IPv6, September 2017.
- **Bishop Heber College (India)**, PhD thesis entitled: Image Mining Techniques to Enhance the Classification Accuracy on Brain Glioma, August 2017.
- **London School of Commerce**, PhD thesis entitled: Improving E-Government Services Security Using Leadership by Example, July 2017.
- **Coventry University**, PhD thesis entitled: Automatic Breast Cancer Classification Using Novel Feature Extraction for Magnetic Resonance Imaging, July 2017.
- **Bharathiar University (India)**, PhD thesis entitled: A novel and secure multi-agent based distributed architecture for e-learning environment, July 2017.
- **Bharathiar University (India)**, PhD thesis entitled: Design and Development of a Novel Weighted Empirical Optimisation Based Classifier for Mining Medical Datasets, April 2017.
- **University of Salford**, PhD thesis entitled: IT Controls in the Public Cloud: Success Factors for Allocation of Roles and Responsibilities, February 2017.
- **Bharathiar University (India)**, PhD thesis entitled: Effective and functional transaction management in non-relational cloud databases, October 2015.
- **Leeds Beckett University**, DBA Professional Doctorate Viva, Thesis entitled: Leadership and Innovation: Innovation Capabilities Strategies in the Canadian Manufacturing Sector, August 2015.
- **University of Liverpool**, PhD thesis entitled, Analysis of human and animal behaviours based on machine learning approach, September 2015.
- **University of Salford**, PhD thesis entitled: A Framework for the Implementation of B2C E-Commerce in Saudi Arabia: A comparative Study of Saudis Living in Saudi Arabia and Those Living in the UK, and the Perception of Saudi Companies, September 2015.
- **Coventry University**, PhD thesis entitled: Effects of Air Pollution on Cardiovascular Diseases in Bangalore, India: An Environmental Health Information System Model, October 2015.
- **Liverpool Hope University**, PhD Transfer Viva, PhD thesis entitled: A Technology Acceptance Model for Health Applications, October 2011.
- **Coventry University**, PhD thesis entitled: A Novel Model for Managing Health Informatics in Saudi Arabia, March 2011.

B.1.12 Internal Examination Experience

- **Dr Natasa Kleanthous**, PhD thesis entitled towards a virtual fencing system: Controlling and monitoring sheep behaviour using audio cues and deep transfer learning, June 2021.
- **Dr Sulaiman Alhasawi**, PhD thesis entitled: ICSrank: A Security Assessment Framework for Industrial Control Systems (ICS), March 2020.
- **Dr Abeer Alsadhan**, PhD thesis entitled: Detecting distributed denial of service attacks in IPV6 by using artificial intelligence techniques, November 2019.
- **Dr Ibrahim Alobaidan**, PhD thesis entitled: Building Trust in Cloud Computing-Isolation in Container Based Virtualisation, August 2019.
- **Dr Mohammed Dighriri**, PhD thesis entitled: Data Traffic Aggregation and Slicing in 5G Networks for Heterogenous Types of IoT Services, August 2019.
- **Dr Philip Kendrick**, PhD thesis entitled: A multi-agent approach to advanced persistent threat detection in Networked System, September 2018.
- **Dr John Henry**, PhD thesis entitled: A framework for combining the Internet of things and serious games, July 2018.
- **Dr. Ali Al Foudi**, PhD thesis entitled: A Slicing-based Resource Allocation and Mobility Management for Emerging Wireless Networks, July 2018.
- **Dr. Ameer A. Jabur**, PhD thesis entitled: An Empirical and Theoretical Study of Pile Foundations Embedded in Sand Soil, June 2018.
- **Ali Alqarni**, MPhil thesis entitled: Cloud Computing SLA Negotiation and Monitoring, December 2017.
- **Dr Bandar Aldawsarii**, PhD thesis entitled: An Energy-Efficient Multi-Cloud Service Broker for Green Cloud Computing Environment, December 2017.
- **Dr Aaron Boddy**, PhD thesis entitled: A Machine Learning Framework for Securing Patient Records, July 2017.
- **Dr Ibrahim Idowu**, PhD thesis entitled: Classification Techniques Using EHG Signals for Detecting Preterm Births, May 2017.

- **Alaa Al Kafri**, MPhil thesis entitled: A Computer Assisted and Systematic Methodology for Detection of Chronic Lower Back Pain (CLBP) using Artificial Intelligence and Computer Graphics Technologies, April 2017.
- **Dr Mark Evans**, MPhil thesis entitled: On Self Organising Cyberdynamic Policy, March 2017.
- **Dr Hector Ruiz**, PhD thesis entitled: Practical Reasoning Models for Situated Autonomic and Deliberative Regulation Systems, Apr 2013.
- **Majed Shafi**, MPhil thesis entitled: An Investigation of user experience and service quality online in the Saudi Banks, Mar 2013.
- **Dr Ruth Thompson**, PhD thesis entitled: A Set Theory Decomposition of Anthony Stafford Beer's Viable System Model; Aspirant of Surpassing Autonomic Computing, Apr 2011.
- **Dr Ali Obied**, PhD thesis entitled: Practical Reasoning Models for Situated Autonomic and Deliberative Regulation Systems, May 2008.
- **Dr Martin Randles**, PhD thesis entitled: A Specification Method for the Scalable Self-Governance of Complex Autonomic Systems, Apr 2008.
- **Dr Victoria Dawn Craig**, PhD thesis entitled: A Methodological Paradigm Shift to Augment a Geographical Information System Planning Framework, Nov 2007.
- **Dr Phil Miseldine**, PhD thesis entitled: Language Support for Process-Oriented Programming of Autonomic Software Systems, Feb 2007.
- **Dr Teresa Farran**, PhD thesis entitled: The evaluation of an intelligent learning system as a learning tool for the solution of numerical problems, Feb 2007.
- **Adam Knowles**, MPhil thesis entitled: Financial time series prediction using higher order pipelined network, Apr 2006.

B.1.13 International Examination Experience

- **PhD Viva**, five students, **British University in Dubai, UAE**, June 2022.
- **PhD Viva**, eight students, **British University in Dubai, UAE**, May 2020.
- **PhD Viva**, two students, **British University in Dubai, UAE**, November 2018.
- **PhD Viva**, five students, **Sudan University of Science and Technology, Sudan**, August 2015.

B.1.14 Independent Chair (PhD Viva)

- **PhD Independent Viva Chair**, Public Health Institute, LJMU, June 2017
- **PhD Independent Viva Chair**, Public Health School, LJMU, August 2016.
- **PhD Independent Viva Chair**, School of Built Environment, LJMU, Dec 2012.
- **PhD Independent Viva Chair**, School of Engineering, LJMU, Oct 2012.

B.2. RESEARCH OUTPUTS

B.2.1 Research Publication Summary

<u>Journal Articles</u>	<u>Books (Writing/Editing)</u>	<u>Book Chapters</u>	<u>Patents</u>	<u>Conference Papers</u>
102	17	17	1	118

B.2.2 Patents

- **Image Edge Direction and Orientation Detecting Method**, Inventors (A. Al-Fayadh, **D. Al-Jumeily**, A. Hussain), Pub. No. (WO/2008/119939), International Filing Date (26.03.2008), IPC (H04N 7/26), G06T 5/00 (2006.01).
- **Mechatronic Hydrocephalus Shunt Valve**, Inventors (Mr. Osman Salih, Dr. Marco Messina, Prof. Dhiya Al-Jumeily), Pending approval.

B.2.3 Best Paper Award

- **The best paper award for paper entitled**, A Systematic Review on Application of Data Mining Techniques in Healthcare Analytics and Data-driven Decisions, **the 5th International Conference on Interactive Digital Media (ICIDM 2018)**, 11th of December 2018, **Liverpool, England**.
- **The best paper award for paper entitled**, Gamification in e-Governance: Development of an online-gamified system to enhance government entities services delivery and promote public's awareness. Presented **at the 5th International Conference on Information and Education Technology**, 10th -12th January 2017, **Tokyo, Japan**.
- **The best paper award for paper entitled**, "Regularized Dynamic Self Organized Neural Network Inspired by the Immune Algorithm for financial time series prediction," presented at the 2014 **Tenth International Conference on Intelligent Computing (ICIC2014)**, 3-6 August 2014, **Taiyuan, China**.

B.2.4 Books (Writing or/and Editing)

- [1]. A Jaya, K Kalaiselvi, D Goyal, D Al-Jumeily, Editing, "Handbook on Intelligent Healthcare Analytics: Knowledge Engineering with Big Data", Wiley Publishers, 2022
- [2]. Panos Liatsis, Abir Hussain, Salama A. Mostafa, **Dhiya Al-Jumeily**, **Editing**: Emerging Technology Trends in Internet of Things and Computing as part of the Communications in Computer and Information Science (CCIS, volume 1548), 2022, Volume 1548, ISBN : 978-3-030-97254-7, Springer Nature, 2022.
- [3]. **D. Al-Jumeily**, J. Hind, J. Mustafina, A. Hussain, H. Tawfik, **Editing**, 'Proceeding of the 14th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 10.1109/DeSE54285.2021, 2021.
- [4]. **D. Al-Jumeily**, J. Hind, J. Mustafina, A. Hussain, H. Tawfik, **Editing**, 'Proceeding of the 13th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2020.
- [5]. Mohammed I. Khalaf, **Dhiya Al-Jumeily**, Alexei Lisitsa, Applied Computing to Support Industry: Innovation and Technology, **Editing**, "Communications in Computer and Information Science", ISSN 1865-0929, ISSN 1865-0937 (electronic), <https://doi.org/10.1007/978-3-030-38752-5>, Springer Nature Switzerland AG 2020.
- [6]. **D. Al-Jumeily**, J. Hind, J. Mustafina, A. Al-Hajj, A. Hussain, E. Magid, H. Tawfik, **Editing**, 'Proceeding of the 12th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2019.
- [7]. **D. Al-Jumeily**, A. Hussain, H. Tawfik, and Jade Hind, **Editing**, 'Proceeding of the 11th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2018.
- [8]. H Hamdan, **D. Al-Jumeily**, A. Hussain, H. Tawfik, and Jade Hind, **Editing**, 'Proceeding of the 10th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2017.
- [9]. S.M. Thampi, S. Krishnan, J.M. Corchado Rodriguez, S. Das, M. Wozniak, **D. Al-Jumeily**, **Editing**, "Advances in Signal Processing and Intelligent Recognition Systems", ISBN 978-3-319-67934-1, Volume 678, Springer 2017.
- [10]. **D. Al-Jumeily**, A. Hussain, H. Tawfik, H Hamdan, Tom Dawson, and Jade Hind, **Editing**, 'Proceeding of the 9th International Conference Developments on eSystems Engineering', **Editing**, IEEE Computer Society, ISBN 978-1-5090-5486-2, ISSN 2161-1343, 2016.
- [11]. **D. Al-Jumeily**, A. Hussain, C. Mallucci and C. Oliver, **Writing**, 'Applied Computing in Health and Medicine', Elsevier Publishing, ISBN: 9780128034682, 2015.
- [12]. D. Ene, D. Al-Jumeily, A. Hussain, **Editing**, 'Beyond IT Digital Models of 8 Monuments from Romania', ISBN: 078-1-902-560-30-4, 2014.
- [13]. G. Papadopoulos, A. Hussain, D. Al-Jumeily, N. Radi, A. Dobb, **Editing**, "Proceedings of the 7th International Development of eSystems Engineering", DeSE14, Publish by LJMU, ISBN: 978-1-902560-29-8, 2014.
- [14]. A. Hussain, D. Al-Jumeily, N. Radi, H. Tawfik, and R. Radvan, **Editing**, 'Proceeding of the 6th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISBN 978-1-4799-5263-2, ISSN 2161-1343, 2013.
- [15]. A. Hussain, H. Tawfik, D. Al-Jumeily and O. Abuelmaatti, Proceedings of the 4th International Conference on Developments in eSystems Engineering', IEEE Computer Society, ISBN 978-0-7695-4593-9, ISSN 2161-1343, 2011.
- [16]. H. Tawfik, A. Hussain, D. Al-Jumeily and A. Nagar, **Editing**, Proceeding of the 3rd International Conference on 'Developments in eSystems Engineering', IEEE Computer Society, ISBN 978-0-7695-4160-0, ISSN 2161-1343, 2010.
- [17]. D. Al-Jumeily, A. Nagar, H. Tawfik, A. Hussain and P. Lisboa, **Editing**, 'Proceeding of the 2nd International Conference on Developments in eSystems Engineering', IEEE Computer Society, ISBN 978-0-7695-3912-6, ISSN 2161-1343, 2009.

B.2.5 Published Peer Reviewed Book Chapters

- [1]. Assi, S., Jayabalan, M., Parakh, V., Assi, J., Al Hamid, A. and Obe, D.A.J., 2024. Predicting Incidence of Stroke via Supervised Machine Learning Methods on Class Imbalanced Data. In Non-Invasive Health Systems based on Advanced Biomedical Signal and Image Processing (pp. 128-144). CRC Press.
- [2]. M. Alloghani, T. Baker, **D. Al-Jumeily**, A. Hussain, J. Mustafina, A.J. Aljaaf; Prospects of Machine and Deep Learning in Analysis of Vital Signs for the Improvement of Healthcare Services. In: Yang XS., He XS. (eds) Nature-Inspired Computation in Data Mining and Machine Learning. Studies in Computational Intelligence, Vol 855. Springer, Cham, 2020.
- [3]. M. Alloghani, **D. Al-Jumeily**, A. Hussain, P. Liatsis, A.J. Aljaaf; "Performance-Based Prediction of Chronic Kidney Disease Using Machine Learning for High-Risk Cardiovascular Disease Patients". In: Yang XS., He XS. (eds) Nature-Inspired Computation in Data Mining and Machine Learning. Studies in Computational Intelligence, Vol 855. Springer, Cham, 2020.
- [4]. M. Alloghani, **D. Al-Jumeily**, A. Hussain, J. Mustafina, T. Baker, A. J. Aljaaf; Implementation of Machine Learning and Data Mining to Improve Cybersecurity and Limit Vulnerabilities to Cyber Attacks. In: Yang XS., He XS. (eds) Nature-Inspired Computation in Data Mining and Machine Learning. Studies in Computational Intelligence, Vol 855. Springer, Cham, 2020.

- [5]. M. Alloghani, **D. Al-Jumeily**, J. Mustafina, Abir Hussain, and Ahmed J. Aljaaf, Book chapter entitled, "A Systematic Review on Supervised and Unsupervised Machine Learning Algorithms for Data"; In: Berry, M., Mohammed, A. and Yap, B. (eds). "Supervised and Unsupervised Learning for Data Sciences", ISSN 2522-848X (Unsupervised and Semi-Supervised Learning Book), Springer Nature Switzerland, Springer 2020.
- [6]. A. A. Jebur, **D. Al-Jumeily**, K. R. Aljanabi, R. M. Al Khaddar, W. A., Zeinab I. Alattar, A. H. Majeed, and J. Mustafina Book chapter entitled, "New Applications of a Supervised Computational Intelligence (CI) Approach: Case Study in Civil Engineering"; Published in the book "Supervised and Unsupervised Learning for Data Sciences", ISSN 2522-848X (Unsupervised and Semi-Supervised Learning Book), Springer Nature Switzerland, Springer 2020.
- [7]. S.Y. Tan, D. Al-Jumeily, J. Mustafina, A. Hussain, Y. Shen. (2020) Design Framework for Learning to Support Industry 4.0. In: Lee N. (eds) Encyclopedia of Computer Graphics and Games. Springer, Cham. https://doi.org/10.1007/978-3-319-08234-9_382-1. ISBN: 978-3-319-08234-9
- [8]. W. Hurst, C.A. Curbelo Montanez, and **D. Al-Jumeily**, 2019, August. Age group detection in stochastic gas smart meter data using decision-tree learning. In International Conference on Intelligent Computing (pp. 593-605). Springer, Cham.
- [9]. M. Alloghani, T. Baker, **D. Al-Jumeily**, A. Hussain, A. J. Aljaaf and J. Mustafina; Book chapter entitled, "Early Detection and Prediction of Lung Cancer using Machine Learning Algorithms Applied on a Secure Healthcare Data System Architecture"; Published in the book entitled: "Machine Learning for Computer and Cyber Security: Principles, Algorithms, and Practices", CRC Press, Taylor & Francis, 2019.
- [10]. K.S. Hashim, R. AlKhaddar, A. Shaw, P. Kot, **D. Al-Jumeily**, R. Alwash, and M.H. Aljefery, 2020. Electrocoagulation as an eco-friendly River water treatment method. In Advances in Water Resources Engineering and Management (pp. 219-235). Springer, Singapore.
- [11]. M. Alloghani, T. Baker, **D. Al-Jumeily**, A. Hussain, J. Mustafina and A.J. Aljaaf, 2020. A systematic review on security and privacy issues in mobile devices and systems. Handbook of computer networks and cyber security, pp.585-608.
- [12]. A. J. Aljaaf, C. Mallucci, **D. Al-Jumeily**, A. Hussain, M. Alloghani, and J. Mustafina; Book chapter entitled, "A Study of Data Classification and Selection Techniques to Diagnose Headache Patients", Published in the book entitled: Applications of Big Data Analytics - Trends, Issues, and Challenges, ISBN 978-3-319-76471-9, DOI: 10.1007/978-3-319-76472-6_6, Springer, 2018.
- [13]. T. Hamid, **D. Al-Jumeily**, J. Mustafina, Book chapter entitled; "Evaluation of the dynamic cybersecurity risk using the entropy weight method", Published in the book entitled: Technology for Smart Futures (pp. 271-287), ISBN 978-3-319-60136-6, Springer, 2018.
- [14]. R. Keight, **D. Al-Jumeily**, A. Hussain P. Fergus, and J. Mustafina; "Big data and data science applications for independent and healthy living". Published in the book entitled: Technology for Smart Futures (pp. 77-111), ISBN 978-3-319-60136-6, Springer, 2018.
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- [17]. M. Randles, D. Lamb, **D. Al-Jumeily**; "Recommender Systems: Network Approaches", chapter 4 in book entitled: "Multimedia Services in Intelligent Environments" by Springer-Verlag, Germany, ISBN: 978-3-319-00371-9, 2013.
- [18]. R. Ghazali and **D. Al-Jumeily**, "Application of Pi-Sigma Neural Networks and Ridge Polynomial Neural Networks to Financial Time Series Prediction", In Zhang, M (ed), Artificial Higher Order Neural Networks for Economics and Business, Ch 12, p.271-293, IGI Global Publisher, ISBN: 978-159904897-0, DOI: 10.4018/978-1-59904-897-0, 2009.

B.2.6 Peer Reviewed Academic Journal Publications

- [1]. Assi, S., Abbas, I., Tang, L., Rowlands, S., Wilson, M., Coombs, T., Arafat, B., Al-Hamid, M. and Al-Jumeily, D., 2024. Evaluating the detection of cocaine and its impurities concealed inside fruit-and vegetable-food products using handheld spatially offset Raman spectroscopy. *Vibrational Spectroscopy*, 131, p.103662.
- [2]. Mohammed, S.H., Al-Jumaily, A., Singh, M.J., Jiménez, V.P.G., Jaber, A.S., Hussein, Y.S., Al-Najjar, M.M. and Al-Jumeily, D., 2024. Evaluation Feature Selection with Using Machine Learning for Cyber-Attack Detection in Smart Grid. *IEEE Access*.
- [3]. Al Hamid, A., Beckett, R., Wilson, M., Jalal, Z., Cheema, E., OBE, D.A.J., Coombs, T., Ralebitso-Senior, K., Assi, S. and Assi Sr, S., 2024. Gender Bias in Diagnosis, Prevention, and Treatment of Cardiovascular Diseases: A Systematic Review. *Cureus*, 16(2).
- [4]. Alatrany, A.S., Khan, W., Hussain, A., Kolivand, H. and Al-Jumeily, D., 2024. An explainable machine learning approach for Alzheimer's disease classification. *Scientific Reports*, 14(1), p.2637.
- [5]. Sweiss, M., Assi, S., Barhoumi, L., Al-Jumeily, D., Watson, M., Wilson, M., Arnot, T. and Scott, R., 2024. Qualitative and quantitative evaluation of microalgal biomass using portable attenuated total reflectance-Fourier

transform infrared spectroscopy and machine learning analytics. *Journal of Chemical Technology & Biotechnology*, 99(1), pp.92-108.

- [6]. Al-Jumaily, A., Alrubae, S.H., Jiménez, V.P.G., Al-Saegh, A.M., Mahmood, A.A. and Al-Jumeily, D., 2023, December. Architecture Design of B5G and 6G Millimeter-Wave Radio Access Network: Using Wireless Communications to Increase Coverage, Capacity and Performance. In 2023 16th International Conference on Developments in eSystems Engineering (DeSE) (pp. 212-217). IEEE.
- [7]. Elbatanouny, H., Khater, T., Ansari, S., Khan, B.M., Khan, W., Almajali, E., Al-Jumeily, D. and Hussain, A., 2023, December. Unveiling the Reliability of ChatGPT Answers in the Biomedical Realm: An Assessment in the. In 2023 16th International Conference on Developments in eSystems Engineering (DeSE) (pp. 228-233). IEEE.
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- [9]. Ayub, M.Y., Hussain, A., Hassan, M.F.U., Khan, B., Khan, F.A., Al-Jumeily, D. and Khan, W., 2023, December. A non-Restraining Sheep Activity Detection and Surveillance using Deep Machine Learning. In 2023 16th International Conference on Developments in eSystems Engineering (DeSE) (pp. 66-72). IEEE.
- [10]. Thompson, M., Assi, S., Obe, D.A.J., McCloskey, A.P., Sarker, S.D., Tang, L., Mohamed, F.A., Wilson, M. and Ehtezazi, T., 2023, December. Use of Raman and Fourier Transform Infrared Spectroscopy as a Quality Control of 3D printed Linalool Fast Dissolving Oral Films. In 2023 16th International Conference on Developments in eSystems Engineering (DeSE) (pp. 498-503). IEEE.
- [11]. Aljaaf, A.J., Ibrahim, M., Al-Ouqaili, M.T.N., Al-Jumeily, D., Mustafina, J., Al-Rawi, A. and Rasheed, M.M., 2023, December. Perspectives on industry 4.0 awareness among undergraduate IT students in IRAQ: University of Anbar as a case study. In 2023 16th International Conference on Developments in eSystems Engineering (DeSE) (pp. 777-781). IEEE.
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- [15]. Ansari, S., Alatrany, A.S., Alnajjar, K.A., Khater, T., Mahmoud, S., Al-Jumeily, D. and Hussain, A.J., 2023. A survey of artificial intelligence approaches in blind source separation. *Neurocomputing*, 561, p.126895.
- [16]. Coombs, T., Abdelkader, A., Ginige, T., Van Calster, P., Harper, M., OBE, D.A.J. and Assi, S., 2023. Understanding drug use patterns among the homeless population: A systematic review of quantitative studies. *Emerging Trends in Drugs, Addictions, and Health*, p.100059.
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- [19]. Salih, O., Messina, M. and Al-Jumeily, D., 2023. Design of a piezoelectrically actuated hydrocephalus shunt valve. *Medical & Biological Engineering & Computing*, 61(9), pp.2281-2290.
- [20]. Sen, P., Assi, S., Assi, J., Liatsis, P., Jayabalan, M. and Al-Jumeily, D., 2023, August. Evaluating Machine Learning and Deep Learning Analytics for Predicting Bankruptcy of Companies. In International Conference on Mechatronics and Intelligent Robotics (pp. 407-419). Singapore: Springer Nature Singapore.
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C. EXTERNAL ENGAGEMENT, RESEARCH and INNOVATION FUNDED PROJECTS

(TOTAL INCOME £7,414,495.00)

C.1. EXTERNAL COLLABORATION FUNDED PROJECTS

C.1.1. Awaiting decision

- **Principal investigator:** Engineering and Physical Science Research Council, TellMySymptoms: Establishing an AI-based application for predicting long-term symptoms of infectious diseases, (£800,000.00), (3 years)

- **Co-Principal investigator:** EC-Horizon-CL2-2022-Heritage-01, Artifex Musicum: The handcraft, the instrument, the music, the audience: Building a new ecosystem for the future, (£3000,000.00), (2 years)

C.1.2. Funded projects including Enterprise and innovative projects

- **Principal investigator:** British Council, UK-Malaysia University Consortium, (£50,000.00), (January 2022-December 2024).
- **Co-Principal investigator:** British Council, Going Global Partnership, (£100,000.00), (January 2022-December 2024)
- **Co-Principal investigator:** Match funding with the Walton Centre NHS Foundation, and Development of augmented reality platform for the training and evaluation of Interventional neuroradiology techniques (mechanical thrombectomy), (£60,000), (2019-2022).
- **Principal investigator:** Match funding with Alder Hey Children's Hospital NHS Trust, SmartShunt for Hydrocephalus, (£60,000). (2014-2018).
- **Co-Principal Investigator:** Royal Academy of Engineering, Newton Research Collaboration Programme-RCP1617/5/67, "A Data Science Approach for the Detection of Variable Light Sources in Uneven Time-Domain Astronomy", (£6000), (Sep 2016-Sep 2017).
- **Co-Principal Investigator:** Newton Research Collaboration Programme between LJMU (Computer Science Department) and The Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil, (£40K), (2016-2017).
- **Principal Investigator:** Doctoral training fund, Al Kowarizmi International College, Abu Dhabi, UAE, (code: R263022), (£52,350.00), (2014-2017).
- **Principal Investigator:** British Council Research Grant, "Developing Research and Curricula for the University of Anbar" in collaboration with LJMU, Reference (A/02417-DFID DeLPHE-Iraq). (Code: R263016), (£50,072), (Jan 2011-2012).
- **Principal Investigator:** Ministry of Higher Education (Iraq), "Scientific research experimentation", (£51,000), (Code: R263017), 2011-2012.

- **LCR4 Holistic**

LCR4.0 HOLISTIC is a fully-integrated digital innovation support project which builds on the success of previous ERDF supported projects (LCR4.0/LCR4.0START). The delivery partners (University of Liverpool Virtual Engineering Centre, University of Liverpool Management School, Liverpool John Moores University – Faculty of Engineering & Growth Platform – Liverpool City Region) will bring their expertise, digital infrastructure and shared learning from LCR4.0 to more sectors and industrial groups in the Liverpool City Region to enable a wide number of LCR SMEs access to the business benefits digitalisation can foster.

The project aims to support SME's to address emerging opportunities and the challenges of moving increasingly to a digitised business and improving conventional supply chains to become a digitally enabled supply ecosystems.

Reflecting regional interest in sector accelerator models to drive high-value growth, LCR 4.0 HOLISTIC will be driven by the digitalised supply-chain challenges set by Strategic Partners such as, but not limited to, (Cammell Laird; Unilever; ARUP; Jaguar Landrover). Industry sector bodies will also be encouraged to share their sector challenges to ensure that challenges are truly sector and not specific to individual large companies within the sector.

The lack of a strong and flexible advanced digital supply chain has been highlighted by these organisations as a critical inhibitor to growth and their ability to remain globally competitive.

Current issues around disruptions in global supply chains are also cited as industry issues. Issues arising post Brexit given key changes to the process of imports/exports and tariffs has highlighted the issue of bringing supply chains closer to the region. The announcement of post-Brexit Freeports provides LCR with an opportunity for differentiating its offer through development of digitally enabled businesses with the flexibility and approach to innovation (supported by the local knowledge hubs) to take advantage of the broad advantages a post-Brexit freeport can bring.

- LCR4.0 Holistic - £6.5mn April 2021 - September 2023
- CW4.0 - £5.7mn April 2021 - September 2023
- LCR4.0 Start - £3.9mn October 2019 - September 2022

- **Co-Principal Investigator:** ERDF fund, The LCR Sustainable Green Travel Corridors (LCR SUD, **£16.7M (£680K to LJMU)**, 2019-2023. (<https://www.ljmu.ac.uk/projects/lcr-sustainable-green-travel-corridors>)
- **Co-Principal Investigator:** KTP Between LivingLens Ltd and LJMU project: "The analysis of LivingLens data Using Data Science Approaches", (**£318,000.00**), (Sep 2017-Sep 2020).
- **Co-Principal Investigator:** KTP Between New Mind Ltd and LJMU project: "the use of Data Analytics in the tourism", (**£60,000.00**), (Jan 2016-Jan 2017).
- **Principal Investigator:** TSB Innovation Vouchers in partnership with Magnex Exercise Technology Ltd, UK (**£5,000.00**), (August 2014-2015).

- **Principal Investigator:** TSB Innovation Vouchers in partnership with Magnex Exercise Technology Ltd, UK (£12,500.00), August 2014-September 2014.
- **Principal Investigator:** Bespoke Training for CCTV Forensic (Abu Dhabi Police Force, UAE)- Five-day course. (Code: J263030), (£12,500.00), March 2014.
- **Principal Investigator:** Three professional training courses for (Merseyside Fire and Rescue) (Two Days for each) (.NET, SQL Server, C#) (Code: G263008), (£8,000.00), April 2013.
- **Principal Investigator:** One Month Bespoke Training for Computer Security & Forensics (Kuwaiti Police Force, Kuwait) (Code: G263009), (£11,340.00), May 2013.
- **Principal Investigator:** Teaching and Research Training Programme for Academics (20 days), Anbar University, Iraq (Code: G263003), (£44,955.00), November 2011.
- **Principal Investigator:** Teaching and Research Training Programme for Academics (20 days), Anbar University, Iraq (Code: G263005), (£35,952.00), October 2011.
- **Principal Investigator:** Consultancy support for academic quality control, Al khawarizmi International College, UAE (2008 to 2011). (Code-J263019), (£160,000.00), September 2011.
- **Principal Investigator:** Development of an embedded system for R.Baker Electrical Ltd, UK Code J263029), (£1,200), Mar 2011-2012.
- **Principal Investigator:** Website development and training for TQMI Ltd, Runcorn, UK (£940), Sep 2010-Oct 2010.
- **Principal Investigator:** Consultancy and Support for Programme Development and Accreditation, British Arab University, UAE (£12,937), Jan 2009 – July 2009.
- **Principal Investigator:** Database Development and Alteration, Everyman Theatre, Liverpool (£1,500), Aug 2008 – Sep 2008.
- **Principal Investigator:** Professional Training Course, .NET Developer, Liverpool (£29,250), Jan 2007 – Jan 2008.
- **Principal Investigator:** Development and Delivery of Oracle 8i Database, Cotton Exchange, Liverpool (£1,500), Aug 2011 – Sep 2011.
- **Principal Investigator:** British Council, Online Archival of Working-Class Writing Project, (£50,000), May 2011 – May 2012.
- **Principal Investigator:** Teaching Company Scheme Partner with SCI Limited (Cheshire), Supported by: Department of Trade & Industry (100%), 3 Year project (£66,230), June 2005 – June 2008.
- **Principal Investigator:** KTP partner with Matheson and Horan Associates Limited”, UK (3 Year Project), supported by: European Social Fund (100%) (£108,723), March 2008 – March 2011.
- **Principal Investigator:** KTP partner with Bridisco Limited, UK. 3 Year project, supported by: Dep. of T & I (50%) & EPSRC -Collaborative Training Accounts (50%). (£44,696), June 2008 – June 2011.
- **Principal Investigator:** Innovation Voucher: This Partnership is supported by: Northwest Development Agency (70%) & Budgie Transport (30%) (Code: J263020). (£10,000), May 2010 – June 2010.
- **Principal Investigator:** Innovation Voucher: This Partnership is supported by Northwest D. Agency (70%)&Code-wizard Company (30%) (Code: J263025). (£10,000), Jan 2011 – Feb 2011.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by the Northwest D. Agency (70%) & Lewis Reed Group (30%) (Code: J263026). (£10,000), Jan 2011 – Feb 2011.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by Train NorthWest Limited, UK & Northwest D. Agency (100%) (Code: J2630014). (£3,000), Sep 2009 – Oct 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by George Bethel Ltd, Stockport, UK & Northwest D. Agency (100%) (Code: J2630010). (£3,000), Aug 2009 – Sep 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by Expert Language Solutions, UK & Northwest D. Agency (100%) (Code: J263009). (£3,000), July 2009 – Aug 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by Employer Solutions Ltd, UK & Northwest D. Agency (100%) (Code: J263008). (£3,000), June 2009 – July 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by Opal Consulting Ltd, UK & Northwest Development Agency (100%) (Code: J263006). (£3,000), June 2009 – July 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by MS Finance Ltd, Liverpool, UK & Northwest D. Agency (100%) (Code: J263007). (£3,000), Mar 2009 – April 2009.
- **Principal Investigator:** Innovation Voucher: This partnership is supported by JMC Business Consulting, UK & Northwest D. Agency (100%) (Code: J263005). (£3,000), Mar 2009 – April 2009.

C.2. INTERNATIONAL STUDENTS RECRUITMENT

- **Project Lead:** Recruiting 22 PhD International Students Countries: Iraq, UAE, Libya, KSA, Oman, Kuwaiti, Qatar, Iran, Malaysia, China (£594,000.00), (2008-2015).
- **Project co-Lead:** The 2+2 Programme with Babylon University, Babylon, Iraq China (£384,000.00), (2014-2017).

C.3. SUCCESSFUL INTERNAL FUNDING (Total Income £450,850.00)

D. EXAMPLES OF ESTEEM

D.1 EDITORIAL DUTIES FOR INTERNATIONAL JOURNALS

- **Editor:** [Computational and Mathematical Methods in Medicine](#), Handawi, Since July 2022.
- **Guest Editor:** A special issue of **Sensors** (ISSN 1424-8220), "[Optoelectronicdes Detection Technology and Artificial Intelligence for Industrial Application](#)", MDPI, May 2022 (Submission deadline 31 January 2023).
- **Guest Editor:** A special issue of **Sensors** (ISSN 1424-8220), "[Big Data and Deep Learning in E-Health](#)", MDPI, February 2022 (Submission deadline 31 January 2023).
- **Guest Editor:** A special issue of **Energies** (ISSN 1996-1073), "[Artificial Intelligence in Energy Grids: Challenges and Opportunities](#)", MDPI, 31 August 2022.
- **Guest Editor:** The International Journal of Artificial Intelligent and Soft Computing (IJAIISC), Special Issue on: 'eSystems Development and Applications', October 2019.
- **Editor:** Applied Computing to Support Industry: Innovation and Technology, Computer Science, ISSN 1865-0937, Springer, Cham 2019.
- **Chief Editor:** The International Research Journal of Computer Science and Technology, ISSN: 0974-6471 (<http://www.computerscijournal.org/editorial-board/>), 2015.
- **Editorial Board Member:** The Cogent Engineering journal (Taylor and Francis publisher), ISSN: 2331-1916, 2014.
- **Guest Editor:** The International Journal of Artificial Intelligent and Soft Computing (IJAIISC), Special Issue on: 'eSystems Development and Applications', June 2014.
- **Guest Editor:** Special Issue in the International Journal of Artificial Intelligence and Soft Computing, Special Issue on: 'Novel Applications of AI for Medical and Engineering Systems' (IJAIISC), ISSN: 1755-4969, 2014.
- **Editorial Board Member:** The International Journal of Simulation Systems, Science & Technology (IJSSST), Since 2008.
- **Editorial Board Member:** Special issue on 'Advances in Intelligent Systems for applied Simulation', the International Journal of Intelligent Systems Technologies and Applications, IJISTA, 2007.
- **Editorial Board Member:** The Int. J. of Interactive Technology and Smart Education', ITSE, since February 2004.

D.2. EDITORSHIP OF SPECIAL JOURNAL ISSUES

- T. Baker, D. Al-Jumeily, H. Tawfik; **Discover Internet of Things Journal**, Special issue [Enabling AI Technologies for Megadata Mining in the Internet of Cognitive Things](#), Springer 2022.
- T. Baker, **D. Al-Jumeily**, Z. Maamar, Z. Tari; **Journal of Software: Practice and Experience**, Special issue on: Semantic eSystems: Engineering methods, techniques, and tools, doi: <https://doi.org/10.1002/spe.2952>, Wiley, 2021.
- T. Baker, L. T. Yang, Z. Tari, D. Al-Jumeily; **Journal of Transactions on Internet Technology**, Special issue on "Next Generation Tactile Internet for Volunteer Computing", ACM, 2020.
- A. Hussain, **D. Al-Jumeily**, H. Tawfik and P. Liatsis; **Journal of Sensors**, special issue on "Robotics, Sensors and Industry 4.0", MDPI, ISSN 1424-8220, 2020.
- A. Hussain, **D. Al-Jumeily**, H. Tawfik and P. Liatsis; **Journal of Sensors**, special issue on "Data Science and Internet of Everything (IoE)"; MDPI, ISSN 1424-8220, 2019.

D.3. INVITED SPEAKER, TV INTERVIEWS, CONFERENCE CHAIR AND SESSIONS CHAIR

D.3.1 TV/Media Interviews

- **Speaker in AIUK Conversion (Moderated by Kenn Cukier)**, Session Name: "*Is AI actually delivering on its promise for society?*", moderated by **Mr. Kenn Cukier**, [AI UK | The Alan Turing Institute](#), 22-23 March 2022, London, UK.
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 - **D.3.2 Invited Funded Keynote Speaker**
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- **Keynote Speaker**, Integrating Artificial Intelligence and Nanotechnology for Real World Applications: Pros and Cons; "[2nd International Meet & Expo on Nanotechnology \(NANOMEET2002\)](#)", 15th–17th August 2022, Edinburgh, UK.

- **Guest Speaker**, Cracking the Corporate Code in Higher Education, StellarEX Speaker Series, The diversity practice (diversitypractice.co.uk), 9th June 2022, London, UK.
- **Keynote Speaker**, “5th International Conference on New Trends in Information and Communications Technology Applications”, 17 –18 November 2021, University of Information Technology and Communications (UoITC), Baghdad, Iraq.
- **Keynote Speaker**, “Artificial Intelligence to Support Sustainable Development Goals”; International Joint Conference 2021 (IJC2021), <https://ijc-conference.com/>, 27 –28 October 2021, Kasetsart University, Bangkok, Thailand.
- **Keynote Speaker**, “Can Machine Learning Do Medicine”; 1st Conference on Science and Technology for early career researchers and postgraduate students (STEPS 2020), Tikrit University 20th – 22nd December 2020, Erbil, Iraq.
- **Keynote Speaker**, “Artificial Intelligence to Support Intelligent Society: (The Journey from Industry 0.0 to 4.0)”, <https://www.computing-conf.org/keynote-speaker/>, 18-20 November 2020, Lisbon, Portugal.
- **Keynote Speaker**, “Artificial Intelligence Journey from Machine Learning to Deep Learning”, International Conference of Information and Communication Technology (ICICT2019), Technically Sponsored by ACM, 15-16 April 2019 Baghdad- Iraq.
- **Invited Speaker**, “Water Resources in Iraq and Their Impact on Building a Sustainable Economy”, Committee for the Defence of Iraq’s Water Rights/ Association of Iraqi Academics (AIA) in the UK, 1st July 2018, London, UK.
- **Keynote Speaker**, “Artificial Intelligence in Real World Applications”, the speech was delivered at 1st Annual International Conference on Information and Sciences (AICIS 2018) Fallujah, technically sponsored by IEEE, 20-21 November, 2018 Organized by University of Fallujah, Iraq.
- **Keynote Speaker**, a keynote address titled “Machine Learning and Medical Practice”. The speech was delivered at the 4th IEEE Latin American Conference on Computational Intelligence LA-CCI <http://la-cci.org/speakers-of-ssocia-2017/>, November 6th-10th, 2017, Peru.
- **Keynote Speaker**, a keynote address titled “Data Science Applications for Independent Living”. The speech was delivered at the 2nd International Conference on Advanced Wireless Information, Data, and Communication Technologies (AWICT 2017) <https://bindscience.com/awict/keynote-speakers/>, 13-14 November 2017, Paris, France.
- **Keynote Speaker**, a keynote address entitled “Data Science: Inspired by the past to motivate the future”, for The 3rd International Conference on Soft Computing in Data Science (SCDS2017) <https://aaec.uitm.edu.my/scds2017/index.php/abstract/15-abstract-dr-dhiya-al-jumeily>, 27-28 November 2017 in Yogyakarta Indonesia.
- **Keynote Speaker**, a keynote address entitled, “Applications of Artificial Intelligence in Healthcare and Medicine” for the Brazilian Congress on Computational Intelligence (CBIC – Congresso Brasileiro de Inteligência Computacional) (<http://cbic2017.org/Keynotes.html>) 1st-2nd November 2017, Rio de Janeiro, Brazil.
- **Keynote Speaker**, Applied Computing in Health and Education, the 2nd International Conference on Soft Computing in Data Science 2016 (SCDS2016), Kuala Lumpur, Malaysia from 21-22 September 2016.
- **Invited Speaker**, “AI and Data Science, Lesson Learned”, Supelec University, Paris, France, March 2016.
- **Keynote Speaker**, “Applied Computing: Theory, Implementation, Application”, the 12th International Conference on Applied Computing, Maynooth, Greater Dublin, 24th – 26th October 2015.
- **Keynote Speaker**, “The Key Role of Communication Technology in Healthcare”, COMNETSAT (2015 IEEE International Conference on Communication, Networks and Satellite) <https://indoaessgrss.org/icares-2015/>, Bandung, 10-12 December 2015.
- **Invited Speaker**, Big Data & Business Intelligence, MBA Programme, Malta University, Malta, 3rd December 2014.
- **Keynote Speaker**, Applied Computing in Health and Education, the IEEE 7th International Conference on Development in eSystem Engineering, Paphos, Cyprus, 25-27 August 2014.
- **Keynote Speaker**, Fraud Detection Using Artificial Neural Networks, Second International Conference on Security in Computer Networks and Distributed Systems (SNDS-2014), Kerala, India, 13-14 March 2014.
- **Keynote Speaker**, e-Learning Trends workshop, Issues Surrounding the Development of a Framework for Producing e-Learning Deliverables from a Single Source. Abu Dhabi Chamber of Commerce, May 2008.

D.3.3 Conference Chair

- **Series General Chair** for International Conference on Developments in eSystems Engineering (DeSE), the conference is ranked by CORE and technically sponsored by IEEE, (dese.org.uk), (2008-Present).
- **Programme Co-chair**, the 4th International Conference on, Advanced Computing, Networking, and Informatics (ICACNI – 2016) (IEEE Technically Sponsor- <http://www.icacni.com/>), 22nd- 24th September 2016, India.
- **Special Session Chair** (System & Software Development) for The 22nd International Conference on Systems, Signals and Image Processing (IWSSIP2015), September 2015, London, UK.

- **Organising Committee Member**, The 4th International Conference on Applied Mechanics, Mechatronics and Intelligent System (AMMIS2016), April 2016, Beijing, China.
- **Tutorial Chair** for the 4th International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), IEEE Communications Society and IEEE Systems, Man, and Cybernetics Society, 10-13 Aug 2015, Kochi, India.
- **Co-Organiser of Special Session**, Time Series Forecasting and Analysis Using Artificial Neural Networks, The Tenth International Conference on Intelligent Computing (ICIC 2014) Aug, 2014, Taiyuan, Shanxi Province, China.
- **Co-Organiser of Special Session**, Mobile Consumer Health Care Networks Systems and Services Workshop (MobiCHeSS), National Research Foundation, 16-18 Dec 2013, Dubai, UAE.
- **Local Arrangements/Venue Chair**, the 2nd International Conference on Computational Intelligence, Communication Systems and Networks (CICSYN2010), 28-30 July 2010, Liverpool, UK.
- **Local Arrangements**, the 1st International on Intelligent Systems, Modelling and Simulation, 27-29 Jan 2010, Liverpool, England.
- **Publicity Chair**, International Conference of Human Computer Interaction, HCI2008, 1-5 Sep 2008, Liverpool, UK.

D.3.4 Session Chair

- **Session Chair** for the 22nd International Conference on Systems, Signals and Image Processing, 10-12 Sep 2015, London, UK.
- **Session Chair** for the 1st International Conference on Web & Open Access to Learning, 25-27 Nov 2014, Dubai, UAE.
- **Session Chair** (Intelligent Data Analysis & Prediction), the 2014 International Conference on Intelligent Computing, ICIC2014, 3-6 Aug 2014, Taiyuan, China.
- **Session Chair**, (Web Services and Applications Session) for the 2014 World Congress in Computer Science, Computer Engineering and Applied Computing (WORLDCOMP'14), 21 – 24 Jul 2014, Las Vegas, USA.
- **Session Chair** (Health Informatics), 1st BCS International IT Conference 2013, 31 March – 1 April 2013, UAE.
- **Track Chair** (Ubiquitous Intelligence and Reality Mining), The 3rd International Conference on Emerging Intelligent Data and Web Technologies, 19-21 September 2012, Bucharest, Romania.
- **Session Chair** (Intelligent Systems), the 1st International Conference on Intelligent Systems, Modelling and Simulation (ISMS2010) 27-29 Jan 2010, Liverpool, UK.

D.3.5 Research Funding Organisation (External Reviewer)

- [DBT/Wellcome Trust India Alliance](#) (India Alliance), 2022.
- **Expert Reviewer for H2020 FET-OPEN**, Europe, (2016-2017).
- **Tertiary Ministry of Education Tertiary Education Research Fund**, Singapore, (2014-Present).
- **Industry Research Collaboration Awards**, National Research Foundation (NRF), UAE, (2013-Present).
- **Qatar Foundation grants reviewer**, Qatar, (2012-Present).

D.3.6 International Journals (Technical Reviewer)

- **IEEE Transactions on Neural Networks and Learning Systems**, IEEE Computational Intelligence Society, Since June 2018.
- **BMC Systems Biology**, BioMed Central, Open Access Journal, Since 2017
- **Applied Sciences**, MDPI, Open Access Journal, Since 2017
- **Computer Methods and Programs in Biomedicine**, Elsevier, Since 2017
- **Swarm and Evolutionary Computation**, Elsevier, Open Access Journal, Since 2017
- **Applied Computing Journal (ACJ)**, Publon, Since 2017
- **Karbala International Journal of Modern Science**, Elsevier, Open Access Journal, Since 2017
- **Cluster Computing**, Springer, Since 2017
- **Micromachines**, MDPI, Open Access Journal, Since 2017
- **Future Generation Computer Systems**, Elsevier, Since 2017
- **Journal of Computers in Education**, Springer, Since 2017
- **Computational and Structural Biotechnology Journal (CSBJ)**, Elsevier Publishing, Since August 2016.
- **The Journal of Computer Methods and Programs in Biomedicine**, Elsevier Publishing, Since April 2016.
- **The journal Embedded Hardware Design (Microprocessors and Microsystems)**, Elsevier Publishing, Since March 2016.
- **Journal of the International Measurement Confederation (IMEKO)**, Elsevier Publishing, Since 2015.
- **International Journal of Computing and Digital Systems (IJCDS)**, Since 2015.
- **World Journal of Computer Application and Technology**, Horizon Research Publishing, USA, Since 2015.

- **The Journal of Computers in Education**, Springer, Since 2015.
- **IEEE's Transactions on Cloud Computing**, IEEE Computer Society, Since 2015.
- **Neurocomputing**, Elsevier Publishing, Since 2014.
- **The Journal of Networks, Software Tools and Applications; Cluster Computing**, Springer, Since 2014.
- **The International Journal of Applied Computing and Informatics**, Elsevier, Since 2013.
- **The International Journal of Computing and Digital Systems (IJCDS)**, Since 2014.
- **Cogent Engineering**, Taylor & Francis Group, Since July 2014.
- **PLOS one**, a peer-reviewed open accessed international journal, since January 2014.
- **The International Journal of Web and Grid Services**, Inderscience Publishers, Since April 2013.
- **ACM International Journal**, Since December 2012.
- **The International Journal of Healthcare Technology and Management (IJHTM)**, Since April 2012.

D.3.7 Book Review

- **Book Reviewer:** Series Title: Intelligent Data-Centric Systems, a new book entitled "Pervasive Computing: Next Generation Platforms for Intelligent Data Collection", Elsevier, January 2015.
- **Invited Book Review:** Developing Java Software (part Two), John Wiley & Sons LTD, UK, November 2005.

D.4. TECHNICAL PROGRAMME MEMBER/INTERNATIONAL SCIENTIFIC COMMITTEES

D.4.1 Technical Programme Committee (TPC)

(25 Selected TPC events out of 53 - Full list can be found in [\icmp2\cmsdalju](#))

- The 1st International Conference on Micro & Nano Technologies, Modelling & Simulation, March 2016, KL, Malaysia.
- The 8th International Conference on Intelligent Networking and Collaborative Systems, Sep. 2016, Czech Republic.
- The 10th International Conference on E-Learning and Games (Edutainment 2016), April 2016, Hangzhou, China.
- The 2nd International conference on Green Computing and Engineering Technology 2016 (ICGCET'16), August 2016, Denmark.
- The 3rd IEEE International Conference on Big Data and Smart City (ICBDSC2016), March 2016, Muscat, Oman.
- The 2015 IEEE International Conference on Communication, Networks and Satellite, Dec 2015, Bandung, Indonesia.
- The 2nd Int. Conference on Communication and Computer Engineering, (ICOCOE 2015), Jun 2015, Thailand.
- The 2015 Asia Pacific Conf. on Multimedia and Broadcasting (APMediaCast 2015), Apr 2015, Bali, Indonesia.
- The International conference on Soft Computing in Data Science (SCDS2015), Sep 2015, Putrajaya, Malaysia.
- The 4th Int. Conf. on Advances in Computing, Communications & Informatics (ICACCI), Aug 2015, Kerala, India.
- The 9th Int. Technology, Education and Development Conference (INTED2015), March 2015, Madrid, Spain.
- The 7th Int. Con. on Intelligent Networking and Collaborative Systems (INCoS-2015), Sep. 2015, Taipei, Taiwan.
- The International Conference on Advanced Computing, Networking, and Informatics (ICACNI-2015) June 2015, Orissa, India.
- International Conference on e-Quality & e-Service Sciences. <http://www.eqess.org>, (eQwSS'2015) Feb 2015, Dubai, UAE.
- International Conference on Computer Vision and Image Analysis Applications, (ICCVIA'2015), Jan. 2015, Sousse, Tunisia.
- International Conference on Computer Applications & Aided Diagnosis (ICCAAD'2014), November 2014, Algiers, Algeria.
- International Symposium on Research of Arts, Design and Humanities (ISRADH 2014), October 2014, Malaysia.
- The 2014 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2014), April 2014 Malaysia.
- The 2013 International Conference on Emerging Technologies (ICET-2013), December 2013, Islamabad, Pakistan.
- The 2013 IEEE Symposium on Engineering and Industrial Applications (ISBEIA 2013), Sep 2013 Kuching, Malaysia.

- The 2013 International Conference on Technology, Informatics (TIME-E 2013) June 2013 Bandung, Indonesia.
- The 19th International Conference on Control Systems and Computer Science, May 2013, Bucharest, Romania.
- The IEEE Symposium on Humanities, Science and Engineering (SHUSER2013) June 2013, Malaysia.
- The 2nd International Conference on Advances in Computing (ICACCI2013), August 2013, Mysore, India.
- The 12th International Symposium on Parallel and Distributed Computing (ISPDC2013), June 2013, Romania.
- The 2nd World Congress on Information and Communication Technologies (WICT 2012), November 2012, India.

D.4.2 International Conferences (Technical Programme Committee)

- IEEE International Conference on Communication, Networks and Satellite, Bandung, 10-12 December 2015, Indonesia.
- The 29th IEEE Int. Conference on Adv. Information Net. and Applications (AINA-2015), Mar 2015, Gwangju, Korea.
- The Advancement in IT Int. Conference (2014 ADVKIT)), December 2014, Bandung, Indonesia.
- The 8th EUROSIM Congress on Modelling and Simulation (EUROSIM2013), September 2013, Cardiff, Wales, UK.
- The IEEE Business Engineering and Industrial App. Colloquium 2013 (IEEE BEIAC 2013), Apr 2013, Malaysia.
- The IEEE Symposium on Computers & Informatics (ISCI 2013), April 2013, Langkawi, Malaysia.
- The 4th Int. Conference on Intelligent Systems, Modelling and Simulation, ISMS2013, January 2013, Thailand.
- The 5th International Congress on Image and Signal Processing (CISP 2012), October 2012, China.
- The 5th International Conference on BioMedical Engineering and Informatics (BMEI 2012), October 2012, China.
- The 2012 IEEE Symposium on Business, Engineering and Ind. Applications (ISBEIA2012), Sep. 2012, Indonesia.
- The Int. conference on Advances in Computing, Communication and Informatics, (ICACCI-2012) Aug 2012, India.
- The 19th International Conference on Systems, Signals and Image Processing, IWSSIP 2012, Vienna, Austria.
- The 13th Int. Conf. on Computer Modelling and Simulation (UKSim2011), Apr 2011 Cambridge University, UK.
- The 2nd International Conference on Intelligent Systems and Simulation (ISMS2011), Jan 2011, Malaysia.
- The 2nd Int. Conf. on Computational Intelligence, Comm. Sys. & Networks (CICSYN2010), Jul 2010, Liverpool, UK.
- The Int. Conference on Engineering Management and Service Sciences' (EMS 2009), Sep 2009, Beijing, China.
- The 1st Int. Conf. on Computational Intelligence, Comm. Sys. & Networks (CICSYN2010), July 2009, Indore, India.
- The 3rd Asia Int. Conf. on Modelling & Simulation, IEEE Computer Society, May 2009, Bali, Indonesia.

D.5 DEPARTMENTAL, FACULTY AND UNIVERSITY SERVICE

D.5.1 Validation Duties

- Member of the Validation Committee, MSc Quantity Surveying and Commercial Management, LJMU, Nov 2007.
- Chairman of the Validation Committee, for the following programmes, LJMU, Apr 2007:
 - BA in Criminal Justice - BA Law and Criminal Justice - BSc Forensic Psychology and Criminal Justice
- Member of the Validation Committee, BS.C. Biomedical Science Programmes, LJMU, May 2007.
- Member of the Validation Committee, MS.C. Quantity Surveying and Commercial Management, Nov 2007.

D.5.2 Development and Proposal of New Programmes

- **The University's first Online Master of Science (MSc) Programmes:** The overall responsibility of planning and developing LJMU first "fully online programmes". These programmes offer a flexible and convenient way for students to gain a relevant postgraduate degree directly applicable to many rapidly developing and emerging sectors within the computing industry. There are three possible routes to the award of MSc in Computing, which enables the student to specialise in: Computing and ICT, Information Systems, and Network Security.
- **Online BSc course in Computing and IT:** The Development of the first fully online BSc Programme for the university. The course offers a flexible and convenient way for students to gain a relevant undergraduate degree directly applicable to many rapidly developing and emerging sectors.

D.5.3 Module Leader of the Following Modules

- Database Design and Technology, MSc, (2012-Present).
- Computing in Practice, BSc, (2013-Present).
- Database Design, Administration and Management, BSc (2013-2014).
- Database Design and Connectivity, BSc (2005-2011).
- Database Systems, MSc, (2007-2012).
- Multimedia Database Systems, MSc, (2004-2010).
- Multimedia Database, BSc (Level 3), (2004-2010).
- Research Methods, MSc (2006-2008).
- OO Principles and the .Net Framework, BSc (Level 2) (2006-2008).
- Software Development and Programming, BSc (Level 1)(2000-2008).
- Software Development Process, BSc (1997-2000).
- Introduction to Computer Programming, BSc (1997-2000).
- Computer Programming & Problem Solving, BSc (1997-2000).
- Software Development Process, BSc (1997-2000).
- Web Development Workshop, BSc (1997-2000).

D.5.4 Staff Mentor for PGCHE

- Mentoring 5 staff for the Degree of Postgraduate Certificate in Higher Education.

D.5.5 Placement Student for Full Time Employment

- Taken placement students for full time employment in our research group for a period of 12 months. 16 placement students have been trained so far where all have managed to get higher grades in their final year. All have managed to get employment as a result of my training during their year of employment within my research group.

D.5.6 Awards and Honours

- Finalist of **Progressive education delivery award**, [The PIONEER Awards 2022](#), September 2022.
- Nominated for a **Vice Chancellor's Award for Research and Knowledge Exchange** in the category of Excellence in Response to the Covid-19 Pandemic, LJMU, 2021.
- Nomination for an **Outstanding Doctoral Supervisor**, LJMU, 2019.
- Nomination for **Amazing Teacher**, LJMU, 2015.
- Nomination for **Amazing Course Team**, LJMU, 2015.
- Nomination for **Amazing Teaching Awards**, LJMU, 2014.
- Nomination for **Best Personal Tutor**, LJMU, 2012.
- **A Certificate of Recognition from the Mayor of Liverpool on the 18th January 2017** for bringing the 9th International Conference on the Developments of eSystems Engineering to Liverpool (31 August – 2 September 2016).
- **A Certificate of Recognition by the Lord Mayor of Liverpool** on the 9th January 2018 for bringing to Liverpool the International Conference on Intelligent Computing (7 - 10 August 2017).
- The school partner with UpGrad-India has been presented as a case study for our partnership between LJMU & upGrad features in the latest UUKi Transnational Education Report, that has just been launched last week, <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2020/the-scale-of-UK-HE-TNE-2018-19.pdf>