

# Prof. Dhiya AL-Jumeily

PHD, MPHIL, MSC, BSC, PGCHE, CITP, FHEA, SENIOR IEEE

**Faculty of Engineering and Technology,  
Liverpool John Moores University, Liverpool UK**

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## **PERSONAL INFORMATION**

### **CONTACT DETAIL**

**Name:** Prof. Dhiya Al-Jumeily  
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### **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, 1995.
- **MSc** in Computer Science, The University of Liverpool, Liverpool, UK, 1991.
- **BSc** in Software Engineering, The University of Liverpool, Liverpool, UK, 1991.

### **PROFESSIONAL BODIES RECOGNITION**

- **Charter IT Professional (CITP)**, the British Computer Society (BCS).
- **Fellow of Higher Education Academy (FHEA)**, Higher Education Academy.
- **Senior Member of IEEE**, The Institute of Electrical and Electronics Engineers.

### **CURRENT POSITION AND APPOINTMENTS**

#### **Academic and Management**

- **Professor of Artificial Intelligence**, Faculty of Engineering and Technology, LJMU, UK, (July 2017-Present).
- **Associate Dean (Global Engagement)**, Faculty of Engineering and Technology, LJMU, UK, (Sep 2015-Nov2018).
- **Visiting Professor**, Supelec University, Paris, France, (2014-Present).

#### **Enterprise, Research and Leadership**

- **Head of Enterprise**, Faculty of Engineering and Technology, LJMU, UK, (Sep 2014–Present).
- **Founder and General Chair** of the International Conference Series on Developments in eSystems Engineering ([www.dese.org.uk](http://www.dese.org.uk)), Technical Sponsor - IEEE, Since 2007.
- **External Examiner**, University of Malta for the BSc (Hons) in Business and IT, Malta, (2014–Present).
- **Currently Supervising** 12 PhD Students (5 as DoS).

#### **Research and Leadership**

- **Successfully Supervised** 16 PhD Students (6 as DoS) and 4 MPhil Students.
- **Head of Applied Computing Research Group**, LJMU, UK, (2010–2016).
- **Deputy Head** of the Software Distributed Research Group, LJMU, UK, (2007–2010).

## Postgraduate Supervision & Examination

<u>PhD Students</u>	<u>MPhil Students</u>	<u>Master Students</u>	<u>PhD/MPhil Examination</u>
Completions: 23	Completions: 3	Completions: 50+	External: 12 (PhD)
Current: 12	Current: 0	Current: 3	Internal: 12 (PhD)

## Research Publication Summary

<u>Thesis Published</u>	<u>Journal Articles</u>	<u>Books</u>	<u>Book Chapters</u>	<u>Patents</u>	<u>Conference Papers</u>
3	58	10	6	1	89

## 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).

## EXTERNAL ENGAGEMENT PROJECTS

- TOTAL INCOME £2,574,085.00

# PUBLICATIONS

## Books (writing or/and Editing)

- [1]. D. Al-Jumeily, A. Hussain, H. Tawfik, and Jade Hind, 'Proceeding of the 11th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2018.
- [2]. H Hamdan D. Al-Jumeily, A. Hussain, H. Tawfik, and Jade Hind, 'Proceeding of the 10th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISSN 2161-1343, 2017.
- [3]. Thampi, S.M., Krishnan, S., Corchado Rodriguez, J.M., Das, S., Wozniak, M., Al-Jumeily, D. (Eds.), "Advances in Signal Processing and Intelligent Recognition Systems", ISBN 978-3-319-67934-1, Volume 678, Springer 2017.
- [4]. D. Al-Jumeily, A. Hussain, H. Tawfik, H Hamdan, Tom Dawson, and Jade Hind, 'Proceeding of the 9th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISBN 978-1-5090-5486-2, ISSN 2161-1343, 2016.
- [5]. D. Al-Jumeily, A. Hussain, C. Mallucci and C. Oliver, 'Applied Computing in Health and Medicine', Elsevier Publishing, ISBN: 9780128034682, 2015.
- [6]. D. Al-Jumeily, A. Hussain, 'Digital Models of 8 Monuments from Romania', ISBN: 078-1-902-560-30-4, 2014.
- [7]. G. Papadopoulos, A. Hussain, D. Al-Jumeily, N. Radi, A. Dobb, "Proceedings of the 7th International Development of eSystems Engineering", DeSE14, Publish by LJMU, ISBN: 978-1-902560-29-8, 2014.
- [8]. A. Hussain, D. Al-Jumeily, N. Radi, H. Tawfik, and R. Radvan, 'Proceeding of the 6th International Conference Developments on eSystems Engineering', IEEE Computer Society, ISBN 978-1-4799-5263-2, ISSN 2161-1343, 2013.
- [9]. 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.
- [10]. H. Tawfik, A. Hussain, D. Al-Jumeily and A. Nagar, Proceeding of the 3rd International Conference on 'Developments in eSystems Engineering', IEEE Computer Society, ISBN 978-0-7695-4160-0, ISSN 2161-1343, 2010.
- [11]. D. Al-Jumeily, A. Nagar, H. Tawfik, A. Hussain and P. Lisboa, 'Proceeding of the 2nd International Conference on Developments in eSystems Engineering', IEEE Computer Society, ISBN 978-0-7695-3912-6, ISSN 2161-1343, 2009.

## Published Peer Reviewed Book Chapters

- [1]. Mohamed Alloghani, Thar Baker, Dhiya Al-Jumeily, Abir Hussain, Ahmed J. Aljaaf and Jamila 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, 2018. (Accepted and waiting for publication).
- [2]. Ahmed J. Aljaaf, Conor Mallucci, Dhiya Al-Jumeily, Abir Hussain, Mohamed Alloghani, and Jamila 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.
  - [3]. R. Keight, D. Al-Jumeily, A. Hussain, P. Fergus, "Big Data and Data Science Applications for Independent and Healthy Living", This chapter has been accepted by Springer publishing as part of a book entitled: Technology and Smart Futures. (Accepted and awaiting to be published).
  - [4]. T. Hamid and D. Al-Jumeily, "Evaluation of the Dynamic Cyber Security Risk Using the Entropy Weight Method", This chapter has been accepted by Springer publishing as part of a book entitled: Technology and Smart Futures. (Accepted and awaiting for publishing by August 2017).
  - [5]. D. Al-Jumeily, M. Al-Zawi, A. J. Hussain and C. Dobre "The Application of Adaptive Pipelined Neural Network Structure in Self-healing System", Big Data and Internet of Things: A Roadmap for Smart Environments by Nik Bessis and Ciprian Dobre, Volume 546, ISBN: 978-3-319-05028-7, pp 111-136, Springer, 2014.
  - [6]. 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.

#### **Peer Reviewed Academic Journal Publications (IN THE LAST THREE YEARS)**

- [1]. A. S. Al-Kafri et al., "Boundary Delineation of MRI Images for Lumbar Spinal Stenosis Detection through Semantic Segmentation using Deep Neural Networks," IEEE Access, 2019.
- [2]. A. S. Al-Kafri, S. Sudirman, A. Hussain, D. Al-Jumeily, P. Fergus, F. Natalia, H. Meidia, N. Afriliana, A. Sophian, M. Al-Jumaily, M. Bashtawi, and W. Al-Rashdan, "Segmentation of Lumbar Spine MRI Images for Stenosis Detection using Patch-based Pixel Classification Neural Network," IEEE Congr. Evol. Comput., p. to appear, 2018.
- [3]. Philip Kendrick, Thar Baker, Zakaria Maamar, Abir Hussain, Rajkummar Buyya, and Dhiya Al-Jumeily; "An Efficient Multi-Cloud Service Composition Using a Distributed Multiagent-based, Memory-driven Approach", IEEE Transactions on Sustainable Computing, (Accepted in Nov. 2018, Waiting for publication), November 2018.
- [4]. E. Petrov, M. Alloghani, A. Hussain, D. Al-Jumeily, J. Mustafina, L. Slavina; "Quality Improvement of Educational Systems: Using iPads and Smart Tablets for Autism Learners to Accomplish Class Activities", International Journal of Scientific Study, ISSN: 2321-6379, Vol 5, Issue 6, September 2017.
- [5]. Paul Fergus, Abir Hussain, Dhiya Al-Jumeily, De-Shuang Huang and Nizar Bouguila, Classification of caesarean section and normal vaginal deliveries using foetal heart rate signals and advanced machine learning algorithms, BioMedical Engineering OnLine, BioMed Eng OnLine (2017) 16:89 DOI 10.1186/s12938-017-0378-z.
- [6]. E. Petrov, M. Alloghani, A. Hussain, D. Al-Jumeily, J. Mustafina, L. Slavina, Quality Improvement of Educational Systems: Using iPads and Smart Tablets for Autism Learners to Accomplish Class Activities, International Journal of Scientific Study, ISSN: 2321-6379, Vol 5, Issue 6, September 2017.
- [7]. M. Khalaf, A. Hussain, R. Keight, D. Al-Jumeily, P. Fergus, R. Keenan, P. Tso "Machine Learning approaches to the application of Disease Modifying Therapy for Sickle Cell using Classification Models", In Press, Neurocomputing, Elsevier, ISI Impact factor 1.634.
- [8]. P. Fergus, A. Hussain, D. Al-Jumeily, A. Kaky, J. Lunn "A Data Science and Machine Learning Approach to Measure and Monitor Physical Activity in Children", In press, Neurocomputing, Elsevier, ISI Impact factor 1.634.

- [9]. A.J. Aljaaf, D. Al-Jumeily, A.J. Hussain, P. Fergus and M. Al-Jumaily, (2016), (WIP16-0232), "Headache Diary: a mobile application for patients with chronic headache", *Pain Practice*. Volume 16, Issue Supplement S1, Wiley-Blackwell, ISSN: 1530-7085, ISI Impact factor 2.317.
- [10]. A. J. Hussain, D. Al-Jumeily, H. Al-Askar and N. Radi, "Regularized Dynamic Self Organized Neural Network Inspired by the Immune Algorithm for financial time series prediction", *Neurocomputing*, Volume 188, Elsevier, 2015, ISSN: 0925-2312, ISI Impact Factor (IF): 2.005, 2016.
- [11]. D. Al-Jumeily, A. J. Hussain, O. Abuelmaatti, P. Fergus, and J. Lunn, "An open learning system for special needs education", *The international Journal of Knowledge Management & E-Learning*, Special Issue Entitled "Models, technologies and approaches toward widening the Open Access to learning and education", Vol.8, No.1, ISSN 2073-7904, IF: 1.052, 2016.
- [12]. Aday Curbelo Montañez, C., Fergus, P., Hussain, A., Al-Jumeily, D., Abdulaimma, B., & Al- Askar, H.; "A genetic analytics approach for risk variant identification to support intervention strategies for people susceptible to polygenic obesity and overweight". In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* Vol. 9771 (pp. 808-819), 2016. doi:10.1007/978-3-319-42291-6\_80.
- [13]. Al Kafri, A. S., Sudirman, S., Hussain, A. J., Fergus, P., Al-Jumeily, D., Al-Jumaily, M., & Al-Askar, H. (2016). A framework on a computer assisted and systematic methodology for detection of chronic lower back pain using artificial intelligence and computer graphics technologies. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* Vol. 9771 (pp. 843-854). doi:10.1007/978-3-319-42291-6\_83.
- [14]. McWhirter, P. R., Wright, S., Steele, I. A., Al-Jumeily, D., Hussain, A., & Fergus, P. (2016). A dynamic, modular intelligent-agent framework for astronomical light curve analysis and classification. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* Vol. 9771 (pp.820-831). doi:10.1007/978-3-319-42291-6\_81.
- [15]. A. Hussain, P. Fergus, H. Al-askar, D. Al-Jumeily, "Utilising Artificial Intelligence Techniques to Predict Preterm Deliveries in Pregnant Women", *Neurocomputing*, ISSN: 0925-2312, IF: 2.005, 2016.
- [16]. J. Lunn, M. Khalaf, A. j. Hussain, D. Al-Jumeily, A. Pich, & S. McCarthy, "The use of serious gaming for open learning environments". *The international Journal of Knowledge Management & E-Learning*, Special Issue Entitled "Models, technologies and approaches toward widening the Open Access to learning and education", Vol.8, No.1, ISSN 2073-7904, IF: 1.052, 2016.
- [17]. Aljaaf, A., Al-jumeily, D., Hussain, A., Fergus, P., al-jumaily, M., & Hamdan, H.; "Partially Synthesised Dataset to Improve Prediction Accuracy (Case Study: Prediction of Heart Diseases)". In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* Vol. 9771, 2016 (pp. 855-866). doi:10.1007/978-3-319-42291-6\_84.
- [18]. M. Khalaf, A. J. Hussain, D. Al-Jumeily, R. Keight, R. Keenan, P. Fergus, I. O. Idowu, "Training neural networks as experimental models: Classifying biomedical datasets for sickle cell disease". In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* Vol. 9771 (pp. 784-795), 2016. doi:10.1007/978-3-319-42291-6\_78.
- [19]. A. Hussain, W. De-Sousa, D. Al-Jumeily, P. Fergus, "The Study of Identity Theft: Credit Card Fraud", *International Journal of Artificial Intelligence and Soft Computing*, ISSN: 1755-4950, 2016.
- [20]. D. Al-Jumeily, A. Hussain, M. Alghamdi, C. Dobbins and J. Lunn, "A Framework to Support an Intelligent Tutorial System for Computer Programming", *Research and Practice in Technology Enhanced Learning: Special Issue on Emerging Trends for Open Access Learning; a SpringerOpen Journal*, Vol. 10, Issue 1, ISSN 1793-7078, 2015.
- [21]. A. J. Aljaaf, D. Al-Jumeily, A. J. Hussain, P. Fergus, M. Al-Jumaily and N. Radi, "A Systematic Comparison and Evaluation of Machine Learning Classifiers Using Headache Data Set", *Advanced*

- Intelligent Computing Theories and Applications, Chapter 12, Volume 9227 of the Series Lecture Notes in Computer Science, ISSN 0302-9743, pp 101-108, Springer International Publishing 2015.
- [22]. D. Al-Jumeily, A. J. Hussain, P. Fergus and N. Radi, "Self-organized Neural Network Inspired by the Immune Algorithm for the Prediction of Speech Signals", Intelligent Computing Theories and Methodologies, Volume 9226 of the Series Lecture Notes in Computer Science, ISSN 0302-9743, pp 654-664, Springer International Publishing 2015.
- [23]. D. Al-Jumeily, S. Iram, F. Vialatte, P. Fergus and A. Hussain, "A Novel Method of Early Diagnosis of Alzheimer's Disease Based on EEG Signals", The Scientific World Journal, Volume 2015, Article ID 931387, Hindawi Publishing, ISSN: 2356-6140, IF: 1.219, 2015.
- [24]. D. Al-Jumeily, A. Hussain, and P. Fergus "Using Adaptive Neural Networks to Provide Self-Healing Autonomic Software", the International Journal of Space-Based and Situated Computing, Inderscience, Vol. 5(3), ISSN: 2044-4907, 2015.
- [25]. P. Fergus, D. Hignett, A. Hussain, D. Al-Jumeily, K. Abdel-Aziz, 'Automatic Epileptic Seizure Detection Using Scalp EEG and Advanced Artificial Intelligence Techniques', BioMed Research International, Hindawi, ISSN:2314-6141, ISI IF: 2.706, 2015.
- [26]. D. Al-Jumeily, A. J. Hussain, "The Performance of Immune Based Neural Network with Financial Time Series Prediction", Cogent Engineering, Taylor and Francis Online, DOI:10.1080/23311916.2014.985005, 2: 985005, ISSN: 2331-1916, 2015.
- [27]. S. Iram, P. Fergus, D. Al-Jumeily, A. Hussain, and M. Randles, "A Classifier Fusion Strategy to Improve the Early Detection of Neurodegenerative Diseases", the International Journal of Artificial Intelligence and Soft Computing (IJAI SC), Vol. 5, No.1, Inderscience, ISSN: 1755-4950, pp. 23-44, 2015.
- [28]. M. Alghamdi, A. W. Symons, D. Al-Jumeily, A. J. Hussain, "Supporting the Learning of Computer Programming in Early Years Schooling", accepted in International Journal of Information Systems (IJ-IS), ISSN: 2356-5896, 2015.
- [29]. P. Fergus, A. Hussain, D. Hignett, D. Al-Jumeily, K. Abdel-Aziz and H. Hamdan, "A Machine Learning System for Automated Whole-Brain Seizure Detection", Applied Computing and Informatics, ISSN: 2210-8327, Elsevier, 2015.
- [30]. P. Fergus, A. Hussain, D. Al-Jumeily, N. Radi; "A Position Paper on Predicting the Onset of Nocturnal Enuresis Using Advanced Machine Learning", Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9226, ISSN 0302-9743, 2015.
- [31]. P. Fergus, A. Hussain, D. Al-Jumeily, I. Idowu, and H. Al-Askar, "Advanced Artificial Neural Network Classification for Detecting Preterm Births Using EHG Records", Neurocomputing, ISSN 0925-2312, DATE.
- [32]. P. Fergus, A. Hussain, D. Al-Jumeily, H. Hamdan, "A Machine Learning System for Automatic Detection of Preterm Activity Using Artificial Neural Networks and Uterine Electromyography Data", Int. J. of Adaptive and Innovative Systems, Inderscience publisher, Vol. 2, No. 2, 2015, ISSN: 1740-2107, 2015.
- [33]. A. Hussain, D. Al-Jumeily, J. Lunn and S. McCarthy, "The Use of Serious Gaming for Education and Open Learning", Knowledge Management & E-Learning: An International Journal (KM&EL) ISSN 2073-7904, EISSN 2073-7904, (Accepted, waiting for publication), 2015, Impact factor 1.052.
- [34]. H. Al-askar, D. Lamb, A. J. Hussain, D. Al-Jumeily, M. Randles and P. Fergus "Predicting Financial Time Series Data Using Artificial Immune System-Inspired Neural Networks", the International Journal of Artificial Intelligence and Soft Computing (IJAI SC), Vol. 5, No.1, Inderscience, ISSN: 1755-4950, pp. 45-68, 2015.
- [35]. A. J. Hussain, D. Al-Jumeily, H. Al-Askar and N. Radi, "Regularized Dynamic Self Organized Neural Network Inspired by the Immune Algorithm for financial time series prediction", Neurocomputing, Elsevier, 2015, ISSN: 0925-2312, ISI Impact factor 1.634.

- [36]. A. Hussain, D. Al-Jumeily, N. Radi, P. Lisboa; 'Hybrid Neural Network Predictive-Wavelet Image Compression System', Volume 151, Part 3, Neurocomputing, Elsevier Publishing, ISSN: 0925-2312, pp. 975–984, ISI Impact factor 2.01, 2015.
- [37]. A. Hussain, P. Fergus, H. Al-Askar, D. Al-Jumeily, "Dynamic Neural Network Architecture Inspired by The Immune Algorithm to Predict Preterm Deliveries in Pregnant Women", Neurocomputing, Volume 151, Part 3, Elsevier, ISSN: 0925-2312, pp. 963–974, ISI IF:2.005, 2015.
- [38]. K. Abdel-Aziz, A. Aljaaf, D. Al-Jumeily, A. Hussain, P. Fergus, "A Novel mobile health application for patients with chronic headache", The Journal of Headache and Pain, 15(Suppl 1):D1, ISSN: 1129-2369, springer open, IF:3.28, 2014.
- [39]. D. Al-Jumeily, R. Ghazali and A. Hussain; "Predicting Physical Time Series using Dynamic Ridge Polynomial Neural Networks", PLoS ONE Open Access Vol. 9, Issue 8: e105766, IF: 4.09, 2014.
- [40]. D. Al-Jumeily, Abir Hussain, Steven Macilwee; "Investigation Of Green Disposal Of Smartphones", Advanced Materials Research, Vol. 1051, ISSN: 1022-6680, pp.622-626, 2014.
- [41]. D. Al-Jumeily, A. Hussain, 'E-Commerce and Visually Impaired'; International Journal of Enhanced Research in Management & Computer Applications, ISSN: 2319-7471, Vol. 3 Issue 8, ER publications, IF: 1.147, 2014.
- [42]. D. Al-Jumeily, A. Hussain, "The Impact of cultural factors on technology acceptance: A Technology Acceptance Model across Eastern and Western cultures", International Journal of Enhanced Research in Educational Development (IJERED), ISSN: 2320-8708, Vol. 2, Issue 4, ER publications, IF: 1.125, 2014.
- [43]. D. Al-Jumeily, M. Al-Zawi, A. Hussain and C. Dobre; "Adaptive Pipelined Neural Network Structure in Self-aware Internet of Things". Big Data and Internet of Things: A Roadmap for Smart Environments Studies in Computational Intelligence, Volume 546, ISSN 1860-949X, Springer, 2014.
- [44]. D. Al-Jumeily, S. Iram, A. Hussain, Francois-Benois Vialatte, P. Fergus, "Early Detection method of Alzheimer's disease Using EEG Signals", The Springer Book Series Lecture Notes in Bioinformatics (LNBI8590), ISSN 0302-9743, Springer 2014.
- [45]. D. Al-Jumeily, A. Hussain, E. Brown, S. Crate; 'Scalable Frameworks for Content-Based Image Retrieval', International Journal of Enhanced Research in Science Technology & Engineering, ISSN: 2319-7463, Vol. 3, Issue 5, 2014, ER publications, IF: 1.252, 2014.
- [46]. A. Hussain, H. Al-Askar and D. Al-Jumeily; "Recurrent Neural Network Inspired by the Immune Algorithm for Time Series Prediction," Book Series Lecture Notes in AI, ISSN: 2161-4393, ISBN:978-1-4673-6128-6, 2014.
- [47]. P. Fergus, A. Hussain, D. Al-Jumeily, "A Smart Framework for Predicting the Onset of Nocturnal Enuresis (PrONE) in Children and Young People", the International Journal of Engineering & Technical Research, Vol. 2, Issue 11, ISSN: 2321-0869, pp. 373-379, IF: 1.315, 2014.

#### **International Conference (peer-reviewed) Publications (IN THE LAST THREE YEARS)**

- [1]. Baker T, García-Campos JM, Gutiérrez Reina D, Toral S, Tawfik H, Al-Jumeily D, Hussain A; "International Conference On Intelligent Computing (ICIC 2018)", 15 Aug 2018 - 18 Aug 2018, Wuhan, China.
- [2]. Kaky, A., Al-Jumeily, D., Haglan, H., Alloghani, M., Baker, T., Hussain, A., & Mustafina, J. (2018). Early Prediction of Chronic Kidney Disease Using Machine Learning Supported by Predictive Analytics. In The bi-annual IEEE World Congress on Computational Intelligence (IEEE WCCI). Rio de Janer.
- [3]. Abdulaimma, B., Hussain, A., Fergus, P., Al-Jumeily, D., Lisboa, P., Huang, D. -S., & Radi, N. (2018, July 8). Improving Type 2 Diabetes Phenotypic Classification by Combining Genetics and Conventional Risk Factors. In 2018 IEEE Congress on Evolutionary Computation (IEEE CEC 2018). Brazil.

- [4]. B. Abdulaimma, A. Hussain, P. Fergus, D. Al-Jumeily, C. Aday Curbelo Mon-tañez, J. Hind, N. Radi, "Association Mapping Approach into Type 2 Diabetes using Biomarkers and Clinical Data", Lecture Notes in Computer Science book series (LNCS, volume 10362), Springer 2017.
- [1]. Robert Keight, Ahmed J. Aljaaf, Dhiya Al-Jumeily, Abir Jaafar Hussain, Aynur Ozge, and Conor Mallucci, "An Intelligent Systems Approach to Primary Headache Diagnosis", Lecture Notes in Computer Science book series (LNCS, volume 10362), Intelligent Computing Theories and Application pp 61-72, Springer, 2017.
- [2]. M. Khalaf, AJ Hussain, D. Al-Jumeily, R Keight, R Keenan, C Chalmers, P Fergus, I Idowu (2017), "A Performance Evaluation of Systematic Analysis for Combining Multi-class Models for Sickle Cell Disorder Data sets", Intelligent Computing Theories and Application pp 115-121, Part of the Lecture Notes in Computer Science book series (LNCS, volume 10362), Springer 2017.
- [3]. C. Montañez, P. Fergus, A. Hussain, D. Al-Jumeily (2017), "Introduction to the Evaluation and Classification of Biomarkers using Direct to Consumer Genetic Data", Accepted for publication at the 2017 International Conference Intelligent Computing, ICIC, Liverpool, UK.
- [4]. A. Al-kafri, S. Sudirman, A. Hussain, D. Al-Jumeily, M. Al-Jumaily, W. Al-Rashdan, M. Bashtawi, P. Fergus, Mohammad Bashtawi, Jamila Mustafina, "Lumbar Spine Discs Labeling using Axial View MRI Based on the Pixels Coordinate and Gray Level Features", Intelligent Computing Methodologies pp 107-116, Part of the Lecture Notes in Computer Science book series (LNCS, volume 10362), Springer 2017.
- [5].
- [6]. Aday Curbelo Montañez, C and Fergus, P and Hussain, A and Al-Jumeily, D Machine Learning Approaches for the Prediction of Obesity using Publicly Available Genetic Profiles, ISSN: 2161-4407, **Published in** : Neural Networks (IJCNN), 2017 International Joint Conference on Neural Networks (IJCNN), IEEE publication, 2017, USA.
- [7]. McWhirter, PR and Steele, IA and Al-Jumeily, D and Hussain, A The Classification of Periodic Light Curves from non-survey optimized observational data through Automated Extraction of Phase-based Visual Features. In: 2017 International Joint Conference on Neural Networks (IJCNN 2017), 14 May 2017 - 19 May 2017, Anchorage, Alaska, USA. (Accepted)
- [8]. Keight, R and Al-Jumeily, D and Hussain, A and Al-Jumaily, M and Mallucci, C Towards the Discrimination of Primary and Secondary Headache: An Intelligent Systems Approach. In: 2017 International Joint Conference on Neural Networks (IJCNN 2017), 14 May 2017 - 19 May 2017, Anchorage, Alaska, USA. (Accepted)
- [9]. Keight, R and Al-Jaaf, A and Hussain, A and Al-Jumeily, D and Ozge, A and Mallucci, C An Intelligent Systems Approach to Primary Headache Diagnosis. In: Lecture Notes in Computer Science . (International Conference Intelligent Computing, 07 August 2017 - 10 August 2017, Liverpool). (Accepted)
- [10]. M. Alloghani, A. Hussain, D. Al-Jumeily, A. AlJaaf, (2017). Gamification in e-Governance: Development of an online gamified system to enhance government entities services delivery and promote public's awareness. In International Conference Proceedings Series by ACM (ISBN:978-1-4503-4791-4), Tokyo, Japan: ACM (Accepted).
- [11]. S. Abdulazeez, and A. El Rhalibi, D. Al-Jumeily, "Evaluation of Scalability and Communication in MMOGs", The 13<sup>th</sup> IEEE Consumer Communications and Networking Conference (IEEE CCNC 2016), Jan. 2016, Las Vegas, USA.
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