### **Curriculum Vitae**

Name: HUSSAIN FALIH MAHDI

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## **Current position:**

Lecturer at Computer and Software Engineering Department, College of Engineering, University of Diyala, Iraq

## **Immediate Past Positions:**

- Military college of engineering Baghdad, Iraq August 1999 September 2003.
- University of technology, computer and software faculty, Baghdad, Iraq Jun 2004-September 2006.
- Diyala University, college of engineering, Diyala, Iraq September 2006-june 2010.

### Degree:

- PhD in in Electrical & electronics Engineering, Universiti Kebangsaan Malaysi, 2017...
- Master of Science (MSc) Degree in computer engineering: Al-Rasheed college of engineering & science, University of technology, Baghdad, Iraq, June 2004.
- B.Sc. Degree in Electrical & electronics Engineering: Military College of engineering Baghdad, Iraq, Jul 1999.

#### INTERNATIONAL INSTITUTIONS AND COMMITTEES MEMBERSHIPS:

- 1- Iraqi Engineers Union Member.
- 2- The Institute of Electrical and Electronics Engineers (IEEE senior member).
- 3- Iraqi academics Syndicate Member.

### Positions I hold under IEEE:

- 1. IEEE UKM Students Branch Social activity chair 2012.
- 2. IEEE UKM Students Branch Vice chair 2013.
- 3. IEEE UKM Students Branch Chair 2014.
- 4. IEEE UKM Students Branch Advisor 2015.
- 5. IEEE Malaysia postgraduate student's representative 2015.
- 6. IEEE Day Ambassador 2015.
- 7. IEEE R 10 Student activity committee 2015.
- 8. IEEE madC ambassador coordinator of Region 10.
- 9. IEEEXtreme PA Lead, Region 10 and ambassador coordinator of Region 10.
- 10. IEEE Region 10 Student activity committee South-East Asia coordinator 2015.
- 11. IEEE Malaysia Section Young Professional Humanitarian Activities Chair 2016.
- 12. IEEE Region 10 Young Professional Committee South-East Asia coordinator 2017-2020.
- 13. IEEE Region 10 Humanitarian activities committee 2017-present.
- 14. IEEE PES YP Exclusive Committee Academic lead 2017-present.
- 15. IEEE Women In Engineering Outreach committee 2018.
- 16. IEEE PES Chapters Student Activities Committee 2019-2020.
- 17. IEEE PES HAC Project Assessment Committee Chair 2019-2020.

## **Awards and Achievement:**

- 1- 1st Prize of IEEE Malaysia Outstanding Student Branch Award 2013.
- 2- 1st Prize of IEEE Malaysia Outstanding Student Branch Award 2014.
- 3- UKM Student Leadership award 2014.
- 4- Best international students sport Award 2013,2014.
- 5- IEEE Malaysia Section Outstanding Student leadership award 2015.
- IEEE Malaysia communication Chapter Best Social Activity Award 2015.
- 7- IEEE Malaysia Section Outstanding Student Volunteer Award 2015.
- 8- IEEE Malaysia ComSoc Best Chapter in the world 2014&2016.
- 9- 2016 DARREL CHONG AWARD winner silver category for project entitled Asian School on Renewable Energy.
- 10- 2016 DARREL CHONG AWARD winner Bronze category for project entitled Flood Relief Missions
- 11- IEEE MGA Young Professional Achievement Award 2016.

### Appreciation and thanks letters:

- 1- (62) Appreciation certificates from IEEE organization
- 2- Appreciation from the Islamic Educational, Scientific and Cultural Organization (ISESCO) and the United Nations Organization for Education, Science and Culture (UNESCO), and the Institution of Engineers of Malaysia (Mechanical Engineering) (IEM).
- 3- (6) Appreciation certificates and thanks letters from National University of Malaysia.
- 4- (4) Thanks letters from Embassy of the Republic of Iraq Cultural Attaché.
- 5- (17) Thanks letters from University of Diyala.
- 6- Thanks letter from Iraqi ambassador in Malaysia.

### **Significant Nature of Achievement:**

- 1- 34 International Conferences.
- 2- more than 35 workshops, seminars, and technical talk
- 3- 13 Humanitarian projects
- 4- Invited speaker in 32 events.

### **PUBLICATIONS**

- 1. Anass Hamadelneel Adow, Mahendra Kumar Shrivas, **Hussain Falih Mahdi**, Musaddak Maher Abdul Zahra, Devvret Verma "Analysis of Agriculture and Food Supply Chain through Blockchain and IoT with Light Weight Cluster Head" Computational Intelligence and Neuroscience, Volume (2022), 2022.
- 2. Tanupriya Choudhury, **Hussain Falih Mahdi**, Archit Agarwal, Arnav Chakraborty, VR Arunachalaeshwaran, Tanmay Sarkar, Ravi Tomar "Quality Evaluation in Guavas using Deep Learning Architectures: An Experimental Review" 2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA).
- 3. VR Arunachalaeshwaran, **Hussain Falih Mahdi**, Tanupriya Choudhury, Tanmay Sarkar, Bikram Pratim Bhuyan "Freshness Classification of Hog Plum Fruit Using Deep Learning" 2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA).
- 4. Sudeshna Chakraborty, **Hussain Falih Mahdi**, Mohammed Hasan Ali Al-Abyadh, Kumud Pant, Aditi Sharma, Fardin Ahmadi "Large-Scale Textual Datasets and Deep Learning for the Prediction of Depressed Symptoms" Computational Intelligence and Neuroscience, Volume (2022) 2022.
- 5. **Hussain Falih Mahdi**, Mohammed Hasan Alwan, Baidaa Al-bander, Aws Zuhair Sameen "A Comparision of Node Detection Algorithms Over Wireless Sensor Network" International Journal of Interactive Mobile Technologies, Volume (16) Issue (7). 2022.
- 6. Sabah Anwer Hussein Y. Radhi's, Yousra Ahmed Fadil, Hussain Falih Mahdi "Soft computing techniques for early diabetes prediction" Indonesian Journal of Electrical Engineering and Computer Science, Volume (25) Issue (2). 2022.
- 7. Hitesh Kumar Sharma, Tanupriya Choudhury, **Hussain Falih Mahdi** "Social and Web Analytics: An Analytical Case Study on Twitter Data" Decision Intelligence Analytics and the Implementation of Strategic Business Management "Book" 2022.
- 8. **Hussain Mahdi**, Baidaa Al-Bander, Mohammed Hasan Alwan, Mohammed Salah Abood, Mustafa Maad Hamdi" Vehicular Networks Performance Evaluation Based on Downlink

- Scheduling Algorithms for High-Speed Long Term Evolution—Vehicle" International Journal of Interactive Mobile Technologies, Volume (15) Issue (21). 2021.
- 9. Mustafa Maad Hamdi, Lukman Audah, Mohammed Salah Abood, Sami Abduljabbar Rashid, Ahmed Shamil Mustafa, **Hussain Mahdi**, Ahmed Shakir Al-Hiti" A review on various security attacks in vehicular ad hoc networks" Bulletin of Electrical Engineering and Informatics, Volume (10) Issue (5). 2021.
- 10. Mohammed Salah Abood, Ahmed Shamil Mustafa, **Hussain Falih Mahdi**, Al-Fakih Ali Mohammed, Mustafa Maad Hamdi, Naser Abbas Hussein" The analysis of Teletraffic and Handover Performance in Cellular System" 2021 3rd International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA).
- 11. **Hussain Falih Mahdi**, Rishit Dagli, Ali Mustufa, Sameer Nanivadekar "Job Descriptions Keyword Extraction using Attention based Deep Learning Models with BERT" 2021 3rd International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA).
- 12. **Hussain Falih Mahdi**, Mohammed Salah Abood, Mustafa Maad Hamdi "Performance evaluation for vehicular ad-hoc networks based routing protocols" Bulletin of Electrical Engineering and Informatics, Volume (10) Issue (2). 2021
- 13. Mustafa Maad Hamdi, **Hussain Falih Mahdi**, Mohammed Salah Abood, Ruaa Qahtan Mohammed, Abdulkareem Dawah Abbas, Alaa Hamid Mohammed "A review on Queue Management Algorithms in Large Networks" .IOP Conference Series: Materials Science and Engineering 1076 (1), 012034. 2021
- **14.** Baidaa Al-Bander, Yousra Ahmed Fadil, **Hussain Mahdi** "Multi-Criteria Decision Support System for Lung Cancer Prediction". IOP Conference Series: Materials Science and Engineering 1076 (1), 012036. 2021
- 15. Mohammed Salah Abood, Hua Wang, **Hussain Falih Mahdi**, Mustafa Maad Hamdi, Ahmad S Abdullah "Review on secure data aggregation in Wireless Sensor Networks". IOP Conference Series: Materials Science and Engineering 1076 (1), 012053. 2021
- 16. HT Haider, DH Muhsen, **HF Mahdi** "Electromagnetism-Like Algorithm-Based Parameters Estimation of Double-Diode PV-Module Model" IOP Conference Series: Materials Science and Engineering 1076 (1), 012002. 2021
- 17. **Hussain Falih Mahdi,** Mustafa Maad Hamdi, Mohammed Salah Abood, Aymen Jalil Abdulelah, Ruaa Qahtan Mohammed "An Overview on Binary and Non-Binary Codes and Challenges in low Parity-Check-Density" 2020 4th International Symposium on Multidisciplinary . 2020
- 18. Mustafa Maad Hamdi, Ahmed Shamil Mustafa, **Hussain Falih Mahd**, Mohammed Salah Abood, Chanakya Kumar, Mahmood A Al-shareeda "Performance Analysis of QoS in MANET based on IEEE 802.11 b" 2020 IEEE International Conference for Innovation in Technology (INOCON) (1-5). 2020

- 19. Ahmed Shamil Mustafa, Mustafa Maad Hamdi, **Hussain Falih Mahdi**, Mohammed Salah Abood "VANET: Towards Security Issues Review". 2020 IEEE 5th International Symposium on Telecommunication Technologies (ISTT) (151-156). 2020
- 20. Syed Faiz Ahmed, Yarooq Raza, **Hussain F Mahdi**, WM Wan Muhamad, M Kamran Joyo, Asadullah Shah, MY Koondhar "Review on sliding mode controller and its modified types for rehabilitation robots" 2019 IEEE 6th International Conference on Engineering Technologies and Applied Sciences (ICETAS) (1-8). 2019
- 21. Mohammed Hasan Alwan, Khairun N Ramli, Yasir Amer Al-Jawher, Aws Zuhair Sameen, **Hussain Falih Mahdi** "Performance comparison between 802.11 and 802.11 p for high speed vehicle in VANET" International Journal of Electrical and Computer Engineering, volume 9 (5), 3687. 2019
- 22. Mohammed Hasan Alwan, Khairun N. Ramli, Ameer Alhasan, Aws Zuhair, Sameen, **Hussain Falih Mahdi**," QOS-AWARE SNR ADMISSION CONTROL MECHANISM" Journal of Theoretical and Applied Information Technology, Vol.97. No 3. 2019
- 23. Chanakya Kumar, **Hussain Falih Mahdi**, "A real time algorithm for the machine to machine communication-smart warrior system", Published in 2017 IEEE 13th Malaysia International Conference on Communications, MICC DOI:10.1109/micc.2017.8311761. 2017
- 24. Mohammed Al-Tahrawi, Mahamod Ismail, Hussain Falih Mahdi, Nordin ramli," Routing protocol in a hybrid sensor and vehicular network for different mobility scenario" Published in 2017 IEEE 13th Malaysia International Conference on Communications, MICC DOI:10.1109/micc.2017.8311761. 2017
- 25. Abdul Kareem Basil; Mahamod Ismail; Mohammed A. Altahrawi; Hussain Mahdi; Nordin Ramli "Performance of AODV and OLSR routing protocols in VANET under various traffic scenarios", Published in 2017 IEEE 13th Malaysia International Conference on Communications, MICC DOI:10.1109/micc.2017.8311761. 2017
- 26. Wafaa Al Chaab; Mahamod Ismail; Mohammed A. Altahrawi; **Hussain Mahdi**; Nordin Ramli; Efficient rate adaptation algorithm in high-dense vehicular ad hoc network", Published in 2017 IEEE 13th Malaysia International Conference on Communications, MICC DOI:10.1109/micc.2017.8311761.

- 27. Mohammed Hasan Alwan, Mandeep Singh, **Hussain Falih Mahdi**, "Performance Comparison Of Turbo Codes With Ldpc Codes And With Bch Codes For Forward Error Correcting Codes" 2015 IEEE Student Conference on Research and Development (SCOReD). 2015
- 28. MA Taher, MJ Singh, M Ismail, SA Samad, MT Islam, **Hussain Falih Mahdi** "Post-IFFT-modified selected mapping to reduce the PAPR of an OFDM system" Circuits, Systems, and Signal Processing 34 (2), 535-555. 2015
- 29. **Hussain Falih Mahdi**, Mahamod Ismail, Rosdiadee Nordin "Literature Survey and Comprehensive Study on Channel Estimation of Wimax System International Journal of Advancements in Computing Technology(IJACT), vol. 5, Number15, November 2013.
- 30. **Hussain Falih Mahdi**, Mahamod Ismail, Rosdiadee Nordin "Investigation of a Joint Channel Estimation Technique for PAPR Reduction in OFDM Systems" 2013 IEEE Student Conference on Research and Development (SCOReD), 16 -17 December 2013, Putrajaya, Malaysia. 2013
- 31. Ali H Al-Waeli, **Hussain Falih Mahdi**" Standalone PV systems for rural areas in Sabah, Malaysia: Review and case study application" International Journal of Computation and Applied Sciences 2(1):41-45.
- 32. Maytham Sabeeh Ahmed, **Hussain Falih Mahdi**, "Investigation of bearing current in a Gas Turbine generator due to static excitation system" 2013 IEEE Student Conference on Research and Development (SCOReD), 16 -17 December 2013, Putrajaya, Malaysia.
- 33. **Hussain Falih Mahdi**, Mahamod Ismail, Rosdiadee Nordin "Comparison of channel state information estimation using slm and clipping-based papr reduction methods" Procedia Technology 11, 955-961. 2013
- 34. Ali Adil Ali, **Hussain Falih Mahdi**, "Tablet PC In Restaurant" 2013 IEEE Student Conference on Research and Development (SCOReD), 16 -17 December 2013, Putrajaya, Malaysia. 2013
- 35. Montadar Abas Taher, JS Mandeep, Mahamod Ismail, **Hussain Falih Mahdi**, "Blind Technique to Lower the PAPR of the MC–CDMA System without complexity" 2011 17th Asia-Pacific Conference on Communications (APCC), 2nd–5th October 2011, Sutera Harbour Resort, Kota Kinabalu, Sabah, Malaysia. 2011

- 36. Montadar Abas Taher, JS Mandeep, Mahamod Ismail, **Hussain Falih Mahdi**, MT Islam, Abidaoun Hamdan Shallal "A Novel Simple Algorithm to Enhance the Peak to Average Ratio of MC-CDMA System" 2011 IEEE International Conference on Signal and Image Processing Applications (ICSIPA2011). 2011
- 37. **Hussain falih mahdi**" An Efficient Rearrangement Of Data For Gray Image Compression Based On Wavelet Transform" Diyala Journal Of Engineering Sciences 4 (2), 29-38.
- 38. **Hussain falih mahdi** "Simulation of Rectangular Microstrip antenna by integrating MATLAB in visual Basic" Diyala Journal of engineering sciences 3 (1), 16-24.

# **QUALIFICATIONS:**

- 1. Excellent Background electrical and electronic engineering.
- 2. Professional in Matlab.
- 3. Personal Computer Installations and Maintenance.
- 4. Leadership skills a Team-working Skills.
- 5. Communication Skills Listening, Clarity and Concision, Friendliness, Confidence, Empathy, Open-Mindedness, and Respect.

### **LANGUAGES:**

- 1. Arabic-Mother Language.
- 2. English (Read, Write, Listening, and Speaking)
- 3. Malay (Malaysian Language: Basic)