

## **Curriculum Vitae**

**Name: Malik Abulrrzzaq Jabbar**

### **1. Education:**

- PhD in electrical engineering, University of Technology Malaysia, awarded in 2014.
- MSc in electrical engineering, JNTU India, awarded in 2011.
- BSc in electrical engineering department, University of Technology, Baghdad, Iraq, awarded in 2002.

### **2. Academic Experience:**

- Lecturer in the electrical Engineering Department, College of Engineering, Misan University, Baghdad, Iraq, 1-7-2013 31-8-2015
- Head quality and training unit, College of Engineering, Misan University, Baghdad, Iraq, 1-9-2014 31-8-2015
- Lecturer in the network Engineering Department, College of Engineering, AllIraqia University, Baghdad, Iraq, 1-9-2015 till now
- Lecturer in the electrical Engineering Department, College of Engineering, AllIraqia University, Baghdad, Iraq, 1-9-2019 till now
- Lecturer in the computer Engineering Department, College of Engineering, AllIraqia University, Baghdad, Iraq, 1-9-2020 till now
- Head of network engineering department in AllIraqia University, Baghdad, Iraq 1-9-2015 till 31-12-2019
- Head of electrical engineering department in AllIraqia University, Baghdad, Iraq 2-1-2020 till 21-9-2020
- Deputy Dean in AllIraqia University, Baghdad, Iraq 1-5-2020 till 9-10-2023
- Dean in AllIraqia University, Baghdad, Iraq 10-10-2023-2020 till now

### **3. Non-Academic Experience:**

- Employment in the Ministry of education 2-1-2004 till 2031-6-2013

### **6. Honors and Awards:**

- I received a patent from UTM Malaysia

### **7. Principal Publications and Presentations of Past Five Years:**

- Review on partial discharge detection techniques related to high voltage power equipment using different sensors
- MM Yaacob, MA Alsaedi, JR Rashed, AM Dakhil, SF Atyah
- Photonic sensors 4 (4), 325-337
- Polymeric composite based on waste material for high voltage outdoor application
- A Aman, MM Yaacob, MA Alsaedi, KA Ibrahim
- International Journal of Electrical Power & Energy Systems 45 (1), 346-352
- Sugeno fuzzy PID tuning, by genetic-neutral for AVR in electrical power generation
- AJH Al Gizi, MW Mustafa, NA Al-geelani, MA Alsaedi
- Applied Soft Computing 28, 226-236

- Detection and wavelet analysis of acoustic emission signal from partial discharge captured by multimode optical fiber and piezoelectric sensors in insulation oil
- MM Yaacob, MA Alsaedi, RA Rahman, N Bidin, W Maqbool.
- International Journal of Physical Sciences 8 (21), 1149-1160
- Worldwide technological revolutions and its challenges under smart grid paradigm: A comprehensive study
- N Zareen, MW Mustafa, AJH Al Gizi, MA Alsaedi
- Int. J. Sci. Eng. Res 3 (11)
- Faults diagnosis and assessment of transformer insulation oil quality: intelligent methods based on dissolved gas analysis a-review
- AR Hussein, MM Yaacob, MA Alsaedi
- International Journal of Engineering & Technology 4 (1), 54
- Adaptive PID controller based on real base function network identification, and genetic algorithm in automatic voltage regulator system
- MW Mustafa, AJH Al Gizi, MA Alsaedi
- International Journal of Scientific and Research Publications 2 (11)
- Partial discharge signal detection using ultra high frequency method in high voltage power equipments: a review
- MM Yaacob, MA Alsaedi, NZA Al Gizi, N Zareen
- International Journal of Scientific and Engineering Research 4 (1), 1-6
- Sugeno fuzzy PID tuning by genetic-neutral for AVR in electrical power generation [J]
- A Gizi, MW Mustafa, NA Al-Geelani, MA Alsaedi
- Applied Soft Computing 28, 226-236
- Comparison study of two commercial spectrometers for heavy metal analysis of laser induced breakdown spectroscopy (LIBS)
- M Arab, N Bidin, ZH Rizvi, S Safie, MA Alsaedi
- Photonic Sensors 4 (1), 63-69
- Fuzzy control system review
- AJH Al Gizi, MW Mustafa, MA Alsaedi, N Zreen
- International Journal of Scientific and Engineering Research 4 (1), 1-8
- Partial Discharge Detection Using Acoustic and Optical Methods in High Voltage Power Equipments: A Review
- A Saedi, MA Razzaq, MM Yaacob
- Advanced Materials Research 845, 283-286

## **Curriculum Vitae**

**Name:** Baraa Munqith Albaker

### **1. Education:**

- PhD, Computer and Control Engineering, Electrical Engineering Department, Malaya University, Kuala Lumpur, Malaysia, 2012
- MSc, Computer and Control Engineering, Electrical Engineering Department, Baghdad University, Baghdad, Iraq, 2003
- BSc, Electrical Engineering, University of Baghdad, Baghdad, Iraq, 2000

### **2. Academic Experience:**

- Head of Department, Electrical Engineering Department, College of Engineering, Al-Iraqia University, (10 Oct. 2022 – present).
- Head of Department, Networks Engineering Department, College of Engineering, Al-Iraqia University, (5 Feb. 2020 - 10 Oct. 2022).
- Assistant Professor, College of Engineering, Al-Iraqia Univ., (2019 – present), full time.
- Lecturer, College of Engineering, Al-Iraqia University, (2016 – 2019), full time.
- Senior Lecturer, UMPEDAC Research Centre, University of Malaya, Kuala Lumpur, Malaysia, (2013-2015), full time.
- Demonstrator, Electrical Engineering Department, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia, (2008 – 2009).
- Head of Department, Computer Programming Department, College of Science and Engineering, University of Science and Technology, Ibb branch, Yemen, (2006 – 2007), full time.
- Assistant Lecturer, Computer & Communication Department, Al-Mansour University, (2005-2006), part-time.
- Assistant Lecturer, Computer Science Department, University of Baghdad, (2004-2005), part-time.
- Assistant Lecturer, Biomedical Engineering Department, College of Engineering, University of Baghdad, (2003-2006), full time.

### **3. Non-Academic Experience:**

- Research Assistant, UMPEDAC Research Centre, University of Malaya, Kuala Lumpur, Malaysia, (4 April 2012 – 19 Nov. 2012), full time.
- Senior Engineer in Communication Projects, General Systems Company, Ministry of Industry and Minerals, Baghdad, Iraq, (2001 – 2003), part-time.

### **4. Certifications or Professional Registrations:**

- Bright Spark Student Program, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia, (2010 –2012).

### **5. Current Membership in Professional Organizations:**

- Iraqi Engineers Union

### **6. Honors and Awards:**

- Best PhD student award with thesis distinction, Faculty of Engineering, University of Malaya, Malaysia, 2012.
- Bright Sparks Sharing Experience, Bright Sparks Unit, University of Malaya, 2013.
- Outstanding Performance Lecturer Award, College of Science and Engineering, University of Science and Technology, Ibb branch, Yemen, 2006.
- Who's Who in the World award, Marquis Who's Who, New Jersey, USA, (2010-2018).
- Year 2000 BSc first-grade prizewinner for Excellent Students in a competition for all Iraqi Universities in the Electrical Engineering field, Head of the Iraqi Presidency Hall, 2000.

#### **7. Principal Publications and Presentations of Past Five Years:**

- Fahad Abdulridha, Baraa M Albaker, "Text Based Deception Detection Using a Hashing Algorithm and Machine Learning Techniques," Al-Iraqia Journal for Scientific Engineering Research, Vol. 3, No.1, pp. 87-92, 2024.
- Ali M. Jasim, Baraa M. Albaker, Hussein Jumma Jabir, "Modeling and Simulation of Simplified Quadruple Diode Solar PV Module Under Influence of Environmental Conditions and Parasitic Resistance," TEM Journal, Vol. 13, No. 1, pp.757-770, 2024.
- Mohannad K. Jalehi, Baraa M. Albaker, "Highly accurate multiclass classification of respiratory system diseases from chest radiography images using deep transfer learning technique," Biomedical Signal Processing and Control, Vol. 84, 2023.

#### **8. Service Activities**

- Head of Postgraduate Division, College of Engineering, Al-Iraqia University, (2018 – 2020).
- Head of Organizing Committee, 2<sup>nd</sup> and 3<sup>rd</sup> Al-Iraqia Undergraduate Research Conference, College of Engineering Building, Al-Iraqia University, (2017,2018).
- Chairman for MSc/PhD Students Proposal Defense and Candidature Defense, UMPEDAC, Deputy Vice-Chancellor (Research & Innovation), Malaya University, Malaysia, 2014
- Member of the higher degree committee, UMPEDAC, Deputy Vice-Chancellor (Research & Innovation), Malaya University, Malaysia, (2013 – 2015).
- Editor, American Journal of Artificial Intelligence, Science Publishing Group, 2017-2021.

#### **9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops.
- Head of microprocessor development laboratory, Al-Khwarizmi engineering college Baghdad University, (2005-2006).

## **Curriculum Vitae**

**Name:** Mohammed Khalid Ibraheem

### **1. Education:**

- PhD, Communications Engineering, Electrical Engineering Department, Malaya University, Kuala Lumpur, Malaysia, 2021
- MSc, Electronic & Electrical Engineering, Eastern Mediterranean University, N. Cyprus, 2014
- BSc, Electronic & communication Engineering, University of Baghdad, Baghdad, Iraq, 2009

### **2. Academic Experience:**

- Network Engineering Department, College of Engineering, Iraqia University, Iraq, Lecturer, 2015- 2017.
- Computer Engineering Department, College of Engineering, Iraqia University, Iraq, Lecturer, 2022-2023.
- Electrical Engineering Department, College of Engineering, Iraqia University, Iraq, Lecturer, 2023- Present.

### **3. Non-Academic Experience:**

- Head of the Computer center, Aliraqia University 2014-2017.

### **4. Current Membership in Professional Organizations:**

- Iraqi Engineers Union

### **5. Principal Publications and Presentations of Past Five Years:**

- Efficient and Real-Time Approach for PQRST and Atrial Fibrillation Detection of ECG Signal 2023 46th International Conference on Telecommunications and Signal Processing (TSP)2023IEEE explore
- A new impedance matching approach for microstrip Rotman lens based on analyzing the standing wave pattern of an electric field Microwave and Optical Technology Letters 2 6 2021 John Wiley & Sons, Inc.
- Comparative analysis between active contour and otsu thresholding segmentation algorithms in segmenting brain tumor magnetic resonance imaging Journal of Information Technology Management 2017 Faculty of Management, University of Tehran
- Microstrip Lens Formulation and Analysis: A Parametric Study Proceedings of the 12th National Technical Seminar on Unmanned System Technology 2020: NUSYS'20 2022 Springer
- A new approach for impedance matching rotman lens using defected ground structure Bulletin of Electrical Engineering and Informatics 2019 Institute of Advanced Engineering and Science (IAES)

### **8. Service Activities**

- Member of scientific committee, College of Engineering, Electrical Engineering, Al-Iraqia University, (2022 – 2023).
- Head of Quality and insurance committee, College of Engineering, Electrical Engineering, Al-Iraqia University, (2022 – 2023).

- Journal Reviewer: American journal of electromagnetics and applications.

**9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops.

## Curriculum Vitae

**Name: Alaa Majeed Ali Muhammed**

### 1. Education:

- MSc in Electrical and Electronics Engineering the Turkish Aeronautical Association University 2017
- BSc Electrical Engineering Baghdad University 2006

### 2. Academic Experience:

- Network Engineering Department, College of Engineering, Al-Iraqia University, Iraq, Assistant Lecturer, (2017- 2018), Full time.
- Electrical Engineering Department, College of Engineering, Al-Iraqia University, Iraq, Assistant Lecturer, (2018- Present), Full time

### 3. Non-Academic Experience:

- Faculty of Fundamentals of Religion, Al-Iraqia University, Iraq, employee, (2007-2010), Full time.
- Administration and Economics Faculty, Al-Iraqia University, Iraq, employee, (2010-2017), Full time.

### 4. Certifications or Professional Registrations:

None

### 5. Current Membership in Professional Organizations:

None

### 6. Principal Publications and Presentations of Past Five Years:

- M. Ali, A. F. Ahmed and A. H. Najim, "Efficient and Effective Scheme for ECG Compression," 2020 2nd Annual International Conference on Information and Sciences (AiCIS), Fallujah, Iraq, 2020, pp. 91-94, doi: 10.1109/AiCIS51645.2020.00024.
- Najim, Ahmed Haitham, and Alaa Majeed Ali. "Face recognition using various feature extraction approaches." IOP Conference Series: Materials Science and Engineering. Vol. 928. No. 3. IOP Publishing, 2020.
- AT Abdulhafedh, AM Ali, LA Jasim, HM Ghenni. "A stand-alone hydrogen photovoltaic fuel cell hybrid system for efficient renewable energy generation." Periodicals of Engineering and Natural Sciences 10.1 (2022): 557-572.
- NJ Ali, NA Hamzah, AM Ali, PS JosephNg, JF Tawfeq, AD Radhi, "An intelligent approach for enhancing the Quality of Service in IoMT based on 5G." Periodicals of Engineering and Natural Sciences 11.3 (2023): 58-67.

### 7. Service Activities

1. **University:** Examination Committees,
2. **Outside the institution**

### 8. Professional Development Activities:

- Many Courses and Workshops.

## Curriculum Vitae

**Name: Anas Fouad Ahmed**

### **1. Education:**

- MSc in Electrical and Electronic Engineering, Electrical Engineering Department, University of Technology, Baghdad, Iraq, 2013.
- BSc in Electronic Engineering, Electronic Engineering Department, University of Mosul, Mosul, Iraq, 2011.

### **2. Academic Experience:**

- Assistant Professor, College of Engineering, Electrical Engineering, Al-Iraqia Univ., (2021 – present), full time.
- Lecturer, College of Engineering, Electrical Engineering, Al-Iraqia Univ., (2018 – 2021), full time.
- Assistant Lecturer, College of Engineering, Computer Engineering, Al-Iraqia Univ., (2014 – 2017), full time.

### **3. Non-Academic Experience:**

- Practical Experience in Electronic circuits Design.
- Practical Experience in Microcontrollers and Microprocessors.

### **4. Certifications or Professional Registrations:**

None

### **5. Current Membership in Professional Organizations:**

Member of the Iraqi Academics Syndicate.

### **6. Honors and Awards:**

None

### **7. Principal Publications and Presentations of Past Five Years:**

1. Ahmed, A. F. (2024). An efficient wavelet thresholding strategy and robust shrinkage approach for de-noising ECG signal. *International Journal of Imaging Systems and Technology*, 34(1), e23009.
2. Ahmed, A. F., Al-Hamadani, A. A., & Al-Obaidi, M. K. (2023, July). Efficient and Real-Time Approach for PQRST and Atrial Fibrillation Detection of ECG Signal. In 2023 46th International Conference on Telecommunications and Signal Processing (TSP) (pp. 91-96). IEEE.
3. Abdulrazzak, I. A., Bierk, H. M., & Ahmed, A. F. (2021). Detection of H<sub>2</sub>S Gas Concentration in Oil Refinery Stations by Using Drone. In *Artificial Intelligence and Renewables Towards an Energy Transition 4* (pp. 649-658). Springer International Publishing.
4. Taha, Z., Jassim, H., Ahmed, A., & Farhan, I. (2021). Design and implementation of triple band half mode substrate integrated waveguide (HMSIW) antenna with compact size. *J. ICT Res. Appl.*, 15(2), 120-138.
5. Ahmed, A. F., Ahmed, M. A., & Bierk, H. M. (2020). Efficient and Robust Approach for Heartbeat Detection of ECG Signal. *Journal of Circuits, Systems and Computers*, 29(08), 2050133.

6. AHMED, M. A., AHMED, A. F., HASAN, R. I., & NSEAF, A. K. (2020). Pixel intensity indicator algorithm using 2d-dct watermarking for coloured image. *Journal of Engineering Science and Technology*, 15(4), 2438-2449.
7. Ali, A. M., Ahmed, A. F., & Najim, A. H. (2020, November). Efficient and effective scheme for ECG compression. In 2020 2nd annual international conference on information and sciences (AiCIS) (pp. 91-94). IEEE.
8. Ahmed, A. F., Ibrahim, A. R., & Abood, M. H. (2023). Toward an optimal wavelet filter and decomposition level for noise elimination of the ECG signal. *Radioelectronics. Nanosystems. Information Technologies.*, 15(4), 401–410. doi:10.17725/rensit.2023.15.401.
9. Ahmed, A. F., Al-Kaseem, B. R., & Taha, Z. K. (2020, November). Efficient and Robust Filtering Method for Medical CT Images. In IOP Conference Series: Materials Science and Engineering (Vol. 928, No. 2, p. 022007). IOP Publishing.

## **8. Service Activities**

Journal Reviewer: Biomedical Signal Processing and Control, IEEE Journal of Biomedical and Health Informatics, ETRI, NIGERIAN JOURNAL OF TECHNOLOGICAL DEVELOPMENT, International Journal of Modeling, Simulation, and Scientific Computing,

## **9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops.

## Curriculum Vitae

Name: Ruaa Muthana Ali

### 1. Education:

- PhD, Medical Physics, University of Baghdad, Baghdad, Iraq, 2020.
- M.Sc., Solid State Physics, University of Baghdad, Baghdad, Iraq, 2016.
- BSc, General Physics University of Baghdad, Baghdad, Iraq, awarded in 2012.

### 2. Academic Experience:

- Lecturer, Physics Department, College of Education, Al-Iraqia University, Baghdad, Iraq, 2017-2020.
- Lecturer, Medical Physics Department, Medenat Elelem University College, Baghdad, Iraq, 2020 until 2023.
- Lecturer, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, 22/2/2023 until now

### Non-Academic Experience:

None

### 4. Certifications or Professional Registrations:

None

### 5. Current Membership in Professional Organizations:

Iraqi Academic Union

### 6. Honors and Awards:

None

### 7. Principal Publications and Presentations of Past Five Years:

1- NK Abbas, AF Abdulameer, RM Ali, SM Alwash, “The Effect of Heat Treatment on Optical Properties of Copper (II) Phthalocyanine Tetrasulfonic Acid Tetrasodium Salt (CuPcTs) Organic Thin Films” Silicon Journal, vol(11), pp843-855(2019) Publisher(Springer Netherlands).

2- Ruaa M Ali, Nada K Abbas, Amal K Abbas, Lamia K Abbas “Biochemical analyses of male rat’s serum administered dexamethasone and green synthesis Cerium Oxide Nanoparticles treatment”, Indian Journal of Forensic Medicine and Toxicology, Volume 14, No 2, April– Jun 2020.

3- Amal K Abbas, Nada K Abbas, Ruaa M Ali, Lamia K Abbas, “Histological and biochemical parameters follow-up in experimental rats administrated dexamethasone and treated with green synthesis titanium dioxide nanoparticles using (Camillia sciences) extracts” Baghdad Sci J, vol (17)  
, PP 663-669, (2020).

4- Ruaa M Ali, Nada K Abbas, Amal K Abbas, Lamia K Abbas, “Histological Sections of Pancreas and Serum Biochemical Changes in Rats after Dexamethasone and Zinc Oxide Nanoparticles Injection” Medico-legal Update, vol 20(1), pp 697, (2020).

5- Ruaa M. Ali and Shurooq S. Mahmood, “Anti-Renal Disorder Activity of Biosynthesis Selenium Nanoparticles against Alloxan-Induced Kidney Injury in Male Rats” *Biochem. Cell. Arch.* Vol. 21, No. 2, pp. 3677-3683, (2021).

6- Doaa M. Hameed, Ali T. Aljanabi, Ruaa M. Ali, Wasif O. Alobaidy, “ Radon Concentrations and Risk Factors Evaluation in Iraqi Museum and Al Mustansiriya Old School in Baghdad Using CR-39 as a Solid State Nuclear Track Detector (SSNTD)”, *NeuroQuantology*, Vol 20(5), pp 374-381, ( 2022).

7- Suha Abbas Ibrahim, Ali T. Aljanabi, Ruaa M. Ali, “Uranium Concentration levels assessment in Soils And Leafy Plants at several Areas in Baghdad using CR-39 Track Detector”, *History of medicine*, 9(1): 1621–1625 (2023).

#### **8. Service Activities:**

- Reviewer, Baghdad Science Journal, Article In Journal
- Reviewer, Journal of Educational and Scientific Studies, Article In Journal
- Reviewer, 2023 International Research Conference on Engineering and Applied Sciences 2023 (**IRCEAS2023**), Article In Proceeding

#### **9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops.

## **Curriculum Vitae**

**Name: Raghda Abd Ul Rab**

### **1. Education:**

- MSc, Computer science , Mustansiriyah university , Iraq, 2018
- BSc, Computer science, Al-Rafidain University College, Iraq, 2012

### **2. Academic Experience:**

- Lecturer, College of Engineering, Al-Iraqia University, (2019 – present), full time
- Member of the examinations committee, College of Engineering, Al-Iraqia University, (2019 – present), full time

### **3. Non-Academic Experience:**

- Trainer for VC#, Vb.net, Matlab, Python and C++ programming courses at Al-Fahd Al-Ahli Institute, full time

### **4. Certifications or Professional Registrations:**

- Many testimonials for my participation in delivering workshops
- Certificates of attendance in many workshops, seminars and conferences
- Certificate of obtaining first place in student festival projects

### **5. Current Membership in Professional Organizations:**

- Academics Organization

### **6. Honors and Awards:**

- First place in engineering student projects for the year 2022-2023 at the Iraqi University, College of Engineering

### **7. Principal Publications and Presentations of Past Five Years:**

- Karim Hashim Al-Saedi, Raghda Abd Alrab Abd Alhassn " Miner Alerts Module To Generate Itemsets Based On FP-Growth Algorithm Improvement", Al-Mustansiriyah Journal of Science, Vol. 29 No. 1 (2018).
- Karim Hashim Al-Saedi, Raghda Abd Alrab Abd Alhassn "A New module to extract features and reduction false alerts based on association rules", Conference: Al-Sadiq Second International Conference on Multidisciplinary in IT and Communication Science and Applications 2017 At: Iraq.

### **8. Service Activities**

- Member of the examinations committee, College of Engineering, Al-Iraqia University

### **9. Professional Development Activities:**

Participate in many international and local conferences, seminars, and workshops.

## Curriculum Vitae

### Hussain Jumaa Jaber

#### 1. Education:

Degree	Discipline	Institution	Year
PhD	Electrical power Engineering	University of Sains Malaysia	2019
MSc	Electrical power Engineering	JNTUH , Hyderabad	2014
BSc	Electrical Engineering and education	University of Technology	2003
B.A	English Language	Al-Mustanseria University	2009

#### 2. Academic Experience:

- Electrical Engineering Department, College of Engineering, Al-Iraqia University, Iraq, Senior Lecturer, (2021- Present), Full time.
- Current Position Head of Laboratories unit and Lecturer at Electrical Engineering Department
- These subject have been taught (( Control engineering I and II, Control engineering laboratory I and II , Electrical Circuits III and IV , Electrical Circuits III , Electrical power I and II , Electrical DC and AC machine))
- First degree supervision ((An investigation in reliability assessment of the generating units using Monte Carlo simulation , An optimal maintenance scheduling in IEEE-RTS of generating adequacy assessment , Partial outage and Load forecast uncertainty modelling in generating adequacy assessment, Load management benefits in reliability assessment of generating systems , Electrical spring modelling based on generating system adequacy , Reliability of generating unit's assessment in presence of PV systems , Stand alone - PV residential systems design and implementation , Three phase and multi loaded Induction machine control , protection and power factor control, Design and implementation of Aquaponic systems by Arduino))
- Rehabilitation of 6 classrooms and 4 Laboratories , maintenance more than 200 Computers , Lab Kits and accessories , four forestation campaign systems.

#### 3. Non-Academic Experience:

- Head of investment in Legal and Contracts Directorate / ministry of water recourses.
- Head of Planning and performance evaluation department / Inspector general Office / ministry of water recourses.
- Head of engineering inspection department / Inspector general Office / ministry of water recourses.
- Head of computer department / Inspector general Office / ministry of water recourses.

#### 4. Certifications or Professional Registrations:

None

#### 5. Current Membership in Professional Organizations:

- Member of the Iraqi Engineers Association since 2003, (Local).
- Member of the Iraqi Translators' Association since 2014, (Local)

#### 6. Honors and Awards:

- Four acknowledgement certificates from the chancellor of Al-Iraqi University, Baghdad, Iraq.

- Twenty eight acknowledgement certificates from the dean of the College of Engineering, Al-Iraqia University, Baghdad, Iraq.
- Three acknowledgement certificates from the Minister of higher education, Baghdad, Iraq.
- More than 32 Acknowledgement certificate from the Ministry of water resources, Baghdad, Iraq.
- One acknowledgement certificates from the embassy of republic of Iraq culture attaché Kuala Lumpur.

#### **7. Principal Publications and Presentations of:**

- Jabir, H.J., Teh, J., Ishak, D. and Abunima, H., 2018. Impacts of demand-side management on electrical power systems: A review. *Energies*, 11(5), p.1050.
- Abunima, H., Teh, J., Lai, C.M. and Jabir, H.J., 2018. A systematic review of reliability studies on composite power systems: a coherent taxonomy motivations, open challenges, recommendations, and new research directions. *Energies*, 11(9), p.2417.
- Jabir, H.J., Teh, J., Ishak, D. and Abunima, H., 2018. Impact of demand-side management on the reliability of generation systems. *Energies*, 11(8), p.2155.
- Abunima, H., Teh, J. and Jabir, H.J., 2019. A new solar radiation model for a power system reliability study. *IEEE Access*, 7, pp.64758-64766.
- Abunima, H., Teh, J. and Jumma, H., 2019. Reactive-active power control for grid-connected PV arrays to enlarge the hosting capacity in a low voltage distribution system. *Jurnal Kejuruteraan*, 31(1), pp.107-114.
- Alsaedi, M.A.J., Jabir, H.J. and Albaker, B.M., 2022. Load shifting impact on generating adequacy assessment during peak period. *Indonesian Journal of Electrical Engineering and Computer Science*, 25(3), pp.1217-1226.
- Abunima, H., Teh, J. and Jumma, H., 2019. An investigation of reactive-active power control approach for grid-connected pv arrays in a low voltage distribution system. In *10th International Conference on Robotics, Vision, Signal Processing and Power Applications: Enabling Research and Innovation Towards Sustainability* (pp. 213-219). Springer Singapore.

#### **8. Service Activities**

- Reviewer of IEEE access and IEEE Open Journal of Systems Engineering
- Reviewer of International Journal of Power Electronics and Drive System (IJPEDS)
- Reviewer of International Journal of Electrical and Computer Engineering (IJECE).
- Reviewer of Indonesian Journal of Electrical Engineering and Computer Science (IAES)
- Reviewer of International Research Conference on Engineering and Applied Sciences.

#### **9. Professional Development Activities:**

- Install 16KW PV solar systems in the college of engineering, Al-Iraqia University.

## **Curriculum Vitae**

**Name:** Mohammed Hussein Ali

### **2. Education:**

- Ph.D. in Communication and computer Engineering from AKSARAY University (Turkey 2017-21)
- M.Tech. in network and Mobile computing/ India & Australia; 2010-12; S.R.M University; information technology department.
- B.Sc. in computer and software engineering; 2002-06; college of engineering; Al-Mustansiriya University.

### **2. Academic Experience:**

- (2012-2015) asst. lecturer at Cihan university/Sulaimaniya.
- (2014-2015) asst. lecturer at Greenwich University (UK) after interviewing done by their committee in order to open a new department (Business Information Technology) as a collaboration between Cihan University and Greenwich University.
- (2017-2018) worked as Lecturer at Al Rasheed College University.
- (2021-202) work as senior lecturer and Head of Dept in deputy at Mazaya University.
- (2021–2023) Head of IT Department at NIT (National Institute for Technology/ Sulaimaniya).

### **3. Non-Academic Experience:**

- (2006) worked as an IT engineer with (GTSI Company) for one year.
- (2006-2007) work as software engineer at general directory of Budget and Programs (Iraqi MOD).
- (2006-2010) worked as network and system engineer in IDN(Iraqi Defence Network).
- (2018-2021) worked as IT manager and Cyber Security trainer at IN2 company (British Company).

### **4. Certifications or Professional Registrations:**

- CCNA course from Indian institute IACM (Work on wireless and wired networks setup and programming related equipments such as (Antenna, switch, router, Server))
- Teaching methods training course
- Windows XP course from Iraq Defence Network Operations Centre and Director general of Communication for the ministry of defense.

### **5. Current Membership in Professional Organizations:**

- Member of the Iraqi Engineers Association since 2006, (Local).

### **6. Honors and Awards:**

- Certificate of appreciation from Multi-Nation Force-Iraq Ministry of defense

## 7. Principal Publications and Presentations of Past Five Years:

- Heart Disease Prediction using WEKA in *journal of Baghdad college of economic science university* No.360 at 2019.
- A novel Analog to Digital Converter for push mode Wireless Sensor Networks, in *International Journal of Psychosocial Rehabilitation*, Vol. 24, Issue 10, 2020 ISSN: 1475-7192. <https://www.psychosocial.com/article/PR300094/22489>.
- Using a Backpropagation Neural Network in WSN for NOx Detection, in *Solid State Technology* Volume: 63 Issue: 6 Publication Year: 2020. <http://www.solidstatetechnology.us/index.php/JSST/article/view/4398>
- Survey On Encode Biometric Data For Transmission In Wireless Communication Networks, in *Periodicals of Engineering and Natural sciences*, Volume: 9, No 4 (2021). <http://pen.ius.edu.ba/index.php/pen/article/view/2570>
- The attitude of mobile apps and it impact in Health and life services through pandemic (Covid-19) in Iraq: National Survey, Volume 5, Issue 1, April 2023 Pages 94-102. [https://passer.garmian.edu.krd/article\\_168057.html](https://passer.garmian.edu.krd/article_168057.html)
- Obfuscated Malware Memory Detection Employing Lazy Instance Based Learner Algorithm Based On Manhattan Distance Function, *Passer Journal of Basic and Applied Sciences* 6 (1), 130-137

## 8. Service Activities

- None

## 9. Professional Development Activities:

- Participation in many conferences, seminars, workshops, and lab development.

## Curriculum Vitae

**Name: Rasha Subhi Ai**

### 1. Education:

- PhD in Computer Science Department, University of Technology, Baghdad, Iraq, awarded in 2017.
- MSc in Computer Science, University of Baghdad, Baghdad, Iraq, awarded in 2013.
- BSc in the Computer Science department, University of Technology, Baghdad, Iraq, awarded in 2008 and ranked (1) in a class of (20) students (honor).

### 2. Academic Experience:

- Lecturer in the Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, 27/4/2022 till now
- Lecturer in the Al-Turath University College, Baghdad, Iraq, 2017.
- Head of registration department in the Al Nisour University College, Baghdad, Iraq, 2018.
- Lecturer in the University of Information Technology and Communications, Baghdad, Iraq, 2017.
- Head of the registration department in the Al Nisour University College
- Responsible for the Documents and Certificates Division at Al-Nisour University College
- Member of the examination committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, from 2022 till now.

### 3. Non-Academic Experience:

- Employment in the Ministry of Culture and I am developing various systems aimed at preserving cultural heritage.
- I am also have worked on the voter's system before 2019

### 6. Honors and Awards:

I received an honor from the Iraqi Minister of Environment for the year 2008, and I ranked first in my bachelor's class, and I also ranked second in my doctoral class in 2017.

### 7. Principal Publications and Presentations of Past Five Years:

- "Fast and Secure Image Encryption System Using New Lightweight Encryption Algorithm", TEM Journal, 13,1,,2024,
- "Proposal for providing secure Zoom meeting through Corona pandemic", Journal of Engineering Research, (Scopus), 2023, Elsevier
- "Secure Big Data Transmission based on Modified Reverse Encryption and Genetic Algorithm", (2023), Iraqi Journal of Science,
- "Enhancement of the cast block algorithm based on novel S-box for image encryption", Sensors ,2022, MDPI
- "Pharmacogenetics Driving Personalized Medicine: Analysis of Genetic Polymorphisms in FCGR2A (Rs1801274) And ERBB2 (Rs1136201) Related to Breast Cancer Medications in Iraqis Populations", HIV Nursing, 22,2,461-465, 2022,
- "Study of diarrheagenic E. coli in Iraqi children", AIP Conference Proceedings, 2386,1,,2022
- "Deep learning for breast cancer classification: Enhanced tangent function", Computational Intelligence, 2022, "John Wiley & Sons, Inc. Hoboken, USA"

- "A novel deep learning neural network for fast-food image classification and prediction using modified loss function",Multimedia Tools and Applications, 2021,Springer US New York
- "Modified quality video: transmission control protocol (TCP) friendly for controlling a congestion",Multimedia Tools and Applications,2021,Springer US New York
- "A novel solution for real time video and path quality, and latency minimization: tele-training in surgical education",Multimedia Tools and Applications,2021,Springer US New York
- "A recent review and a taxonomy for multimedia application in Mobile cloud computing based energy efficient transmission",Multimedia Tools and Applications ,2020,Springer US
- "A novel Modified Chaotic Simplified Advanced Encryption System(MCS-AES):mixed reality for a secure surgical tele-presence",Multimedia Tools and Applications,2020,Springer US New York
- "A new approach to generate multi S-boxes based on RNA computing",Int. J. Innov. Comput. Inf. Control,16,1,331-348,2020,
- "A novel solution for a wireless body sensor network: Telehealth elderly people monitoring,"Egyptian Informatics Journal, 2020,Elsevier
- "A novel augmented reality to visualize the hidden organs and internal structure in surgeries",The International Journal of Medical Robotics and Computer Assisted Surgery, 2020,
- "A new S-box generation algorithm based on multistability behavior of a plasma perturbation model",IEEE Access,7,,124914-124924,2019,IEEE
- "Enhancement AES based on 3D chaos theory and DNA operations addition",Karbala Int. J. Mod. Sci,5,2,112-118,2019,

## **8. Service Activities**

I am working as a reviewer into:

- International Journal of Medical Robotics and Computer Assisted Surgery
- International Journal of Imaging Systems and Technology
- Journal of Engineering Science and Technology
- International Journal of Advanced Computer Science and Application (IJACSA)
- Applied Computational Intelligence and Soft Computing
- Journal of Engineering Research
- International Journal of Computers and Applications

## **9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops.

## Curriculum Vitae

**Name:** Jasim Mohmed Jasim

### 1. Education:

- PhD, Electrical Power (Power Transformer, Methods of control, devices), Electrical faculty, Eastern Ukrainian National University after V. Dal, Luhansk, 2013
- Specialty (MSc), Electrical Power Networks (Load distribution), Electrical faculty, Eastern Ukrainian National University after V. Dal, Luhansk, 2008
- BSc, Electrical Engineering, University of Mustansiriya, Baghdad, Iraq, 2001

### 2. Academic Experience:

- Assistant Professor, College of Engineering, Al-Iraqia University, (April, 2024 – present)
- Assistant Professor, Al-Musayib Technical College, Al-Furat Al-Awsat Technical University, (December, 2016 – April, 2024)
- Head of Department, Electrical Engineering Power Technology, Bilad Alrafidain University College, (2015 – December, 2016)
- Laboratory Lecture, Electrical Machinery Engineering Branch, Eastern Ukrainian National University after V. Dal, Luhansk, (September, 2011- September, 2012)

### 3. Non-Academic Experience:

- Electrical Engineer, Al-Mazroui and Al-Khatib Company, UAE, (December, 2002 – September, 2005)
- Head of Engineers, Al-Mazroui and Al-Khatib Company, UAE, (September, 2005 – July, 2006)
- Project Manager Engineer, Secondary Contracting Company with the Ministry of Communications, Iraq, Baghdad, (March, 2014 – January, 2015)

### 4. Certifications or Professional Registrations:

- The Active Member of the International Informatization Academy, Moscow, 2014

### 5. Current Membership in Professional Organizations:

- Head of Engineers of Iraqi Engineers Union

### 6. Honors and Awards:

- PhD (Excellent with honor) Eastern Ukrainian National University after V. Dal, Luhansk, 2013

### 7. Principal Publications and Presentations of Past Five Years:

- Jasim, J.M.J., Shvedchykova, I., Panasiuk, I., Romanchenko, J., Melkonova, I., “Increasing the efficiency of multy-variant calculations of electromagnetic field distribution in matrix of a polygradient separator”, EUREKA, Physics and Engineering, 2021, pp. 69–79
- Shavolkin, O., Shvedchykova, I., Jasim J.M.J., “Improved Control Of Energy Consumption By A Photovoltaic System Equipped With A Storage Device To Meet The Needs Of A Local Facility”, Eastern-European Journal of Enterprise Technologies, 2021, pp. 6–15
- O. Shavolkin, I. Shvedchykova, J.M.J. Jasim., “Energy management of a photoelectric system with a storage battery for the needs of a local object with the planned generation

of electricity into the grid”, IEEE 62nd International Scientific Conference on Power and Electrical, 2021

- AlJanabi, M., Abed, J.K., Ali, J.M.J., Jasim, J.M., Alani, N., “Analysing and Distinguishing Images of Failed Skin Cancer using Modern Swarm Intelligent Techniques(MSITs), IOP Conference Series: Materials Science and Engineering, 2020
- N. Mohanad AlJanabi, Mahmood H. Enad, Jasim Mohmed Jasim, Rawaa A. Abdul-Nab, “Study of impact of art performance level of blue laser technology applications and its control”, Indonesian Journal of Electrical Engineering and Computer Science, 2020, pp.1383~1389
- J.M.J. Jasim, M. Aljanabi, W.K. Shakir Al Jubori, “The choice of suspended insulators for calculation of step-down substation of industrial district by total power 115 MVA”, KPU named after Igor Sikorsky, 2020
- Al-Tameemi, Z.H., Neda, O.M., Jumaa, F.A., ...Aljanabi, M.H., Jasim, J.M., “Optimal Sizing and Location of DG Units for Enhancing Voltage Profile and Minimizing Real Power Losses in the Radial Power Systems Based on PSO Technique”, IOP Conference Series: Materials Science and Engineering, 2019
- Shavelkin, A., Jasim, J.M.J., Shvedchykova, I., “Improvement of the current control loop of the single-phase multifunctional grid-tied inverter of photovoltaic system”, Eastern-European Journal of Enterprise Technologies, 2019, pp. 14–22
- AlJanabi, M., Enad, M.H., Jasim, J.M.J., Abdul-Nab, R.A., Alani, N., “Study of impact of art performance level of blue laser technology applications and its control”, Indonesian Journal of Electrical Engineering and Computer Science, 2019, pp. 1383–1389
- A. Shavelkin, J.M.J. Jasim, I. Shvedchykova, “Expanding the capabilities of the photovoltaic converter unit of the electric power system in the intelligent energy management system of the local object”, V International scientific and practical conference dedicated to the memory of Professor Viktor Mykhailovych Synkov, 2019, p.42

## **8. Service Activities**

- Articles Reviewer: The 4th International Conference on Electromechanical Engineering and its Applications (ICEMEA2023), Baghdad
- Articles Reviewer: the 2<sup>nd</sup> International Scientific Conference of Engineering Sciences (ISCES2020), Diyala
- Discussion Committee Member for MSc students, Al-Furat Al-Awsat Technical University, Iraq, 2023
- Discussion Committee Member of Central Technical University, Baghdad, 2023

## **9. Professional Development Activities:**

- Participate in many international and local conferences, seminars, and workshops, 2011 – until now and development Scientific Patent (Invention) to the useful model №63484, 2011

## **Curriculum Vitae**

**Name: Ayad Tahseen Abdulhafedh**

### **1. Education:**

- BSc in Electrical Engineering, University of AlMustanseria, Baghdad, Iraq, awarded in 2003/2004.
- MSc in Electrical and Electronic Engineering, University of Turkish Aeronautical Association Institute of Science And Technology. Awarded in 2017.

### **2. Academic Experience:**

Lecturer, Electrical Engineering Department, College of Engineering, AllIraqia University, Baghdad, Iraq, 2018 until now for different subjects( electric circuits lab for two years, The Electromagnetic Fields for 3 years , Electrical power two years and electrical Machine lab. For 3 years ac and dc machines).

### **3. Non-Academic Experience:**

Maintenance engineer, implementation engineer, and electrical works supervisor engineer from 2004 to 2018, and continues to make electrical designs for simple buildings.

### **4. Certifications or Professional Registrations:**

None

### **5. Current Membership in Professional Organizations:**

- **Iraqi Engineers Union.**

### **6. Honors and Awards:**

None

### **7. Principal Publications and Presentations of Past Five Years:**

- Abdulhafedh, A.T.; Ali, A.M.; Jasim, L.A.; Ghani, H., "A stand-alone hydrogen photovoltaic fuel cell hybrid system for efficient renewable energy generation," Journal of Periodicals of Engineering and Natural Science.

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### **8. Service Activities**

University Scientific, Examination and many others.

### **9. Professional Development Activities:**

Many Courses and workshop.



## Curriculum Vitae

1. **Name:** Qasim Hadi Kareem

2. **Education:**

- PhD. Communication engineering, electrical engineering department, Mustansiriyah University, Baghdad, Iraq, 2022.
- MSc. Electronics and Communication engineering, electrical engineering department, University of Baghdad, Baghdad, Iraq, 2015.
- BSc. Electrical engineering department, University of Baghdad, Baghdad, Iraq, 2012.

3. **Academic Experience:**

- Lecturer, college of engineering, Al-Iraqia University (2023-present) full time
- Lecturer, Al-Farabi university college (2015-2023) full time

4. **Non-Academic Experience:**

- Title/Position, Institution, Country, (year from – to), full time or part time.

5. **Certifications or Professional Registrations:**

- None

6. **Current Membership in Professional Organizations:**

- Iraqi Engineers Union

7. **Honors and Awards:**

- None

8. **Principal Publications and Presentations of Past Five Years:**

- A dual port spatially diverse antenna system for cognitive radio applications.
- Design a Linear and Circular Polarization MIMO Antennas Based on Compact Size Configurations with High Isolation and Stable Gain Characteristics for C- Band and WLAN / WiMAX Applications.
- Compact Dual-Polarized Eight-Element Antenna with New Geometry for 5 G Mobile Terminal Applications.
- Compact Dual-Polarized Reconfigurable MIMO Antenna Based on a Varactor Diode for 5G Mobile Terminal Applications.
- Reconfigurable Compact Quad-port MIMO Antennas for sub-6 GHz Applications.
- A quad-port multiple-input-multiple-output system for underlay or interweave cognitive radio.

9. **Service Activities**

- Within and outside the institution
- Journal Reviewer: Optical communication, Acta polytechnic.

10. **Professional Development Activities:**

- Participation in conferences, seminars, workshops, system/material/lab development, etc.

## Curriculum Vitae

Mohammed Nasser Hussain

### 1. Education:

- PhD., Computer and Control, Elec. Eng. Dept. , College of Engineering, Baghdad University, Iraq 2004
- M.Sc., Computer and Control, Elec. Eng. Dept. , College of Engineering, Baghdad University, Iraq 1999
- B.Sc, Elec. Eng. Dept. , College of Engineering, Al-Mustansiriyah University, Iraq, 1995

### 2. Academic Experience:

Professor, Elec. Eng. Dept., College of Engineering, Al-Iraqia Univ., (2021 – present), full time.

### 3. Non-Academic Experience:

- Dean 2004-2005 & 2019-2020 full time.
- Dean Assistant for Administrational, Financial, Legal issues 2005 to 2008 & 2015 to 2019 full time
- Direct Manager (MACSD) Mustansiriyah Academy for Computer Skills Development / college of Engineering / Al-Mustansiriyah University 1-3-2008 to 13-10-2014
- Head Department, Computer Eng., College of Engineering, Al-Mustansiriyah University, Iraq, 2014-2015

### 3. Certifications or Professional Registrations:

- An abbreviated review of deep learning-based image classification models (Scopus)
- Facial expression recognition using HOG and LBP features with convolutional neural network (Scopus)
- Solar Tracking System by Utilized Optimized Algorithm Based Deep Learning (Scopus)
- Facial Expression Recognition using Transfer Learning and Fine-Tuning Strategies: A Comparative Study (Scopus)
- Unmanned Ground Vehicle Prototype Development for Search Evacuation and Defense Based on IoRT (Scopus)
- Reduction of papr pattern with low complexity using hybrid-pts scheme for the 4G and 5G multicarrier systems (Scopus)
- Mathematical determination of the optimal control and maintenance scheme for industrial processes (Scopus)
- Neural network analysis for the solidification scheme of the recycled metal casting (Scopus)
- Negative authentication and password secured systems (Scopus)
- Solar panel performance enhancement using smart cleaning cooling system (Scopus)
- Sludge Thickeners Establishment PLC Based in AL-Rusafa Water Treatment (International)
- PLC base for Sludge Thickening Unite in Water Treatment Plant (International)
- Zigbee Transceiver Multipath Fading Based on OQPSK Modulation (International)
- CCNA1 (Network Fundamentals) Cisco, CCNA2(Switching & Routing) Cisco, CCNA3(WAN Technology)Cisco, MOS Microsoft, MCSA Microsoft, MCSE Microsoft, Electronic Circuit Design EWB

**5. Current Membership in Professional Organizations:**

Iraqi Engineers Union		
Iraqi	Academic	Union
Iraqi syndicate for elites and Scientifics		

**6. Honors and Awards:**

World Bank Award - scientific researches and projects

UNESCO - UN Award - Maker Camp

**7. Principal Publications and Presentations of Past Three Years:**

**• 8. Service Activities**

Visiting Dar Bra'am Sleek Orphanage, Visiting the Nursing Home, Visiting Baghdad H. for children Cancer Diseases, etc..

**9. Professional Development Activities:**

- Participation in conferences, seminars, workshops, system/material/ lab development, etc.

## **Curriculum Vitae**

**Name: Hiba Hadi Kurdi**

### **1. Education:**

- MSc, Power Engineering, Electromechanical Engineering, University of Technology, Baghdad, Iraq, 2018.
- BSc in Electromechanical Engineering, University of Technology, Baghdad, Iraq, 2013

### **2. Academic Experience:**

Full-time assistant lecturer, College of Engineering, Al-Iraqia Univ., (2018 – present).

### **3. Principal Publications and Presentations of Past Five Years:**

- J. Jalil, E. Ali, H. Kurdi, “Numerical and Experimental Study of Cooling in Desktop Computer with Block Heat Sink”, Engineering and Technology Journal, Vol. 36, Part A, No.4, 2018.
- J. Jalil, E. Ali, H. Kurdi, “Numerical and Experimental Study of CPU Cooling with Finned Heat Sink and Different P.C. Air Passages Configurations”, Al-Nahrain Journal for Engineering Sciences (NJES), Vol.21 No.1, pp.99-107, 2018.

### **9. Professional Development Activities:**

- Participation in conferences, seminars, workshops, system/material/lab development, etc.

## **Curriculum Vitae**

### **Khalid Jumaa Kazim**

#### **1. Education:**

- i. Ph.D., Mechatronics: 2017 OVG University, Germany
- ii. M.Sc. Mechatronics: 2009 University of Baghdad,
- iii. B.Sc. of Mechatronics: 2005 University of Baghdad,

#### **2. Academic Experience:**

- Member of the faculty in the Department of Electrical Engineering / Al Iraqia University.
- Member of the faculty in the Department of Mechatronics Engineering / Baghdad University (from 2019 to 2021).
- Fundamentals of Electrical Circuits, Mechatronics Dep., Baghdad Uni. 2021.
- Hydraulic and Pneumatic Systems, Mechatronics Dep., Baghdad Uni. 2021.
- Digital Techniques, Electrical Engineering Dep., Al Iraqia University.
- Mechanical Engineering, Middle Technical University, Baghdad 2017-2018.
- Optimal Control, OvG University (Germany) / WS 2015-2016.
- Introduction to Cybernetics, OvG University (Germany) / WS 2013-2014.
- Optimal Control, OvG University (Germany) / WS 2012-2013.
- Nonlinear Control, OvG University (Germany) / SS 2012.
- Nonlinear Control, OvG University (Germany) / SS 2013.
- Mathematics, Al-Rafidain University College/Baghdad in 2009.

#### **3. Non-Academic Experience:**

- Installing and management of internet networks using MikroTik, 2008.
- Coordinator and manager of a project supported by IRD Organization, 2007.
- Worked as a control engineer in the East Tigris Water Treatment Plant, 2007.
- Trained 3 months in State Company of Electrical Industries / Iraq 2002.
- Supervisor in the tally center of the Iraqi Independent High Electoral Commission, 2010.

#### **4. Certifications or Professional Registrations:**

- Certificate in Scientific Writing / Max Planck Institute (Germany) 2012.
- Certificate in Academic Writing (OvG University, Germany) 2015.
- Certificate in CCNA Networking Certificate from Cisco Academy 2009.
- Certificate in satellite VSAT / University of Baghdad 2009.
- Certificate in Marketing and Management from IRD 2007
- English proficiency certificate /Baghdad University 2005.

- Teaching Methods / Al-Mustansiriya University 2010.

#### **5. Current Membership in Professional Organizations:**

- Member in Iraqi Engineers Association. 2006
- Member in Federation of Arab Engineers 2010

#### **6. Honors and Awards:**

- Five ACKNOWLEDGEMENTS from the minister of Higher Education.
- Six ACKNOWLEDGEMENTS from the Dean of college of engineering.

#### **7. Principal Publications and Presentations of Past Five Years:**

- Combined Predictive Path Following and Admittance Control. Conference: Annual American Control Conference (ACC) Wisconsin, USA 2018.
- Towards a Unified Approach for Path-following and Force-feedback Using Predictive control, The International Association of Applied Mathematics and Mechanics (GAMM). March 2016 in Braunschweig, Germany.
- Conference organized by DAAD organization for Iraqi students in Hamburg, Germany 2014

#### **8. Service Activities**

- Reviewer of scientific paper in the Annual American Control Conference (ACC) 2020.
- Reviewer of scientific papers in upcoming International Research Conference on Engineering and Applied Sciences 2023, Baghdad

#### **9. Professional Development Activities:**

- Conference organized by DAAD organization for Iraqi students in Bonn, Germany 2011.
- Conference organized by DAAD organization for international students in Gotingen University, Germany 2012.

## Curriculum Vitae

**Name:** Bashar Sakeen Farhan

### 1. Education:

- PhD., Power System, Huazhong University of Science and Technology, China in 2017
- M.Tech., Power System , SHIATS, India, 2013
- B.Sc, Electrical and Electronics engineering, College of Engineering, Al-Mustansiriya University, Iraq, 2004

### 2. Academic Experience:

Assistant Professor, College of Engineering, Al-Iraqia Univ., (2019 – present), full time.

### 3. Non-Academic Experience:

- Assistant Chief Engineer/ Baghdad Governorate Water Directorate, Iraq, (2004-2019)  
Title/Position, Institution, Country, (year from – to), full time.

### 4. Certifications or Professional Registrations:

None

### 5. Current Membership in Professional Organizations:

Iraqi Engineers Union

### 6. Honors and Awards:

None

### 7. Principal Publications and Presentations of Past Five Years:

- MA Alsaedi, HJ Jabir, BS Farhan, BM Albaker “Power Systems Reliability Assessment based on Load Shaping Consideration” TEM121-36, February 2023.
- Ahmed M Saheb, Bashar Sakeen Farhan “Design and Measurement of a Modern Charging System Based on IoT.” Instrumentation, Mesures, Métrologies,2022.
- Habib Ur Rahman Habib, Asad Waqar, Bashar Sakeen Farhan, Tanveer Ahmad, Mehdi Jahangiri, Moustafa Magdi Ismail, Parvez Ahmad, Asad Abbas, Yun-Su Kim” Analysis of Optimal integration of EVs and DGs into CIGRE’s MV Benchmark Model” IEEE Access.2022
- Rasool M Imran, Bashar Sakeen Farhan, Yuan-Jun Yang, Habib Ur Rahman Habib, Firas MF Flaih “Comparative Investigation of Lithium-ion Charging Methods Implemented via a Single DC/DC Converter” , 2021 5th International Conference on Green Energy and Applications (ICGEA),p32-37,2021
- Habib Ur Rahman Habib, Shaorong Wang, Asad Waqar, Bashar Sakeen Farhan, Kotb M Kotb, Yun-Su Kim “Combined Heat and Power Units Sizing and Energy Cost Optimization of a Residential Building by Using an Artificial Bee Colony Algorithm” , IEEE Access,2020

## **8. Service Activities**

None

## **9. Professional Development Activities:**

- Participation in conferences, seminars, workshops, system/material/lab development, etc.

## Curriculum Vitae

**Name: Ali Kadim Hantoosh**

### 1. Education:

- PhD degree in applied physics from applied sciences department - University of Technology (2019).
- MSc degree in applied physics from applied sciences department- University of Technology (2016).
- BSc in applied physics from applied sciences department - University of Technology (2013).

### 2. Academic Experience:

- Lecturer at the electrical engineering department/college of engineering/Al-Iraqia University, (2023 – present), Full time.

### 3. Non-Academic Experience:

- Non

### 4. Certifications or Professional Registrations:

- None

### 5. Current Membership in Professional Organizations:

- Current memberships only

### 6. Honors and Awards:

- .None

### 7. Principal Publications and Presentations of Past Five Years:

- Al-Mousoi, Ali K; Mohammed, Mustafa KA; Pandey, Rahul; Madan, Jaya; Dastan, Davoud; Ravi, G; Sakthivel, P; ,Simulation and analysis of lead-free perovskite solar cells incorporating cerium oxide as electron transporting layer,RSC advances,12,50,32365-32373,2022,Royal Society of Chemistry
- Mohammed, Mustafa KA; Al-Mousoi, Ali K; Singh, Sangeeta; Younis, Umer; Kumar, Anjan; Dastan, Davoud; Ravi, G; ,Ionic liquid passivator for mesoporous titanium dioxide electron transport layer to enhance the efficiency and stability of hole conductor-free perovskite solar cells,Energy & Fuels,36,19,12192-12200,2022,American Chemical Society
- Al-Mousoi, Ali K; Mohammed, Mustafa KA; Pandey, Rahul; Madan, Jaya; Dastan, Davoud; Ravi, G; Sakthivel, P; ,Simulation and analysis of lead-free perovskite solar cells incorporating cerium oxide as electron transporting layer,RSC advances,12,50,32365-32373,2022,Royal Society of Chemistry
- Mohammed, Mustafa KA; Singh, Sangeeta; Al-Mousoi, Ali K; Pandey, Rahul; Madan, Jaya; Dastan, Davoud; Ravi, G; ,Improving the potential of ethyl acetate green anti-solvent to fabricate efficient and stable perovskite solar cells,RSC advances,12,50,32611-32618,2022,Royal Society of Chemistry
- Pandey, Rahul; Bhattarai, Sagar; Sharma, Kulbhushan; Madan, Jaya; Al-Mousoi, Ali K; Mohammed, Mustafa KA; Hossain, M Khalid; ,Halide composition engineered a non-toxic

perovskite–silicon tandem solar cell with 30.7% conversion efficiency,ACS Applied Electronic Materials,5,10,5303-5315,2023,American Chemical Society

Shrivastav, Nikhil; Kashyap, Savita; Madan, Jaya; Al-Mousoi, Ali K; Mohammed, Mustafa KA; Hossain, M Khalid; Pandey, Rahul; Ramanujam, Jeyakumar; ,Perovskite-CIGS monolithic tandem solar cells with 29.7% efficiency: a numerical study,Energy & Fuels,37,4,3083-3090,2023,American Chemical Society

Mohammed, Mustafa KA; Al-Mousoi, Ali K; Singh, Sangeeta; Kumar, Anjan; Hossain, M Khalid; Salih, Sinan Q; Sasikumar, P; Pandey, Rahul; Yadav, Anuja A; Yaseen, Zaher Mundher; ,Improving the performance of perovskite solar cells with carbon nanotubes as a hole transport layer,Optical Materials,138,,113702,2023,North-Holland

Al-Mousoi, Ali K; Mohammed, Mustafa KA; Kumar, Anjan; Pandey, Rahul; Madan, Jaya; Dastan, Davoud; Hossain, M Khalid; Sakthivel, P; Yaseen, Zaher Mundher; ,Understanding Auger recombination in perovskite solar cells,Physical Chemistry Chemical Physics,25,24,16459-16468,2023,Royal Society of Chemistry

Dastan, Davoud; Mohammed, Mustafa KA; Al-Mousoi, Ali K; Kumar, Anjan; Salih, Sinan Q; JosephNg, PS; Ahmed, Duha S; Pandey, Rahul; Yaseen, Zaher Mundher; Hossain, M Khalid; ,Insights into the photovoltaic properties of indium sulfide as an electron transport material in perovskite solar cells,Scientific reports,13,1,9076,2023,Nature Publishing Group UK London

Mohammed, Mustafa KA; Al-Mousoi, Ali K; Kumar, Anjan; Sabugaa, Michael M; Seemaladinne, Ramanjaneyulu; Pandey, Rahul; Madan, Jaya; Hossain, M Khalid; Goud, Burragoni Sravanthi; Al-Kahtani, Abdullah A; ,Harnessing the potential of Dion-Jacobson perovskite solar cells: Insights from SCAPS simulation techniques,Journal of Alloys and Compounds,963,,171246,2023,Elsevier

## **8. Service Activities**

Journal Reviewer: Applied Energy, Heliyon, Optical Materials, Results in Optics, Solar Energy and others.

## **9. Professional Development Activities:**

**None**

## **Curriculum Vitae**

**Name:** Ali Jasim Mohammed

### **1. Education:**

- MSc, Electronic & telecommunication- Electric Engineering, Faculty of Electrical Engineering, University Technology Malaysia, Johor Bahru, Malaysia, 2015.
- BSc, Laser & Optoelectronics Engineering, University of Technology, Baghdad, Iraq, 2009.

### **2. Academic Experience:**

- Assistant Lecturer, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (10/04/2023 – present), full time.
- Assistant Lecturer, Electrical Engineering College, Electronics & Telecom Department, University Technology Malaysia (UTM), Johor Bahru, Malaysia, (1/09/2016- 20/12/2018), part time.

### **3. Non-Academic Experience:**

- Director, Electrical Engineering Company, Malaysia, (20/03/2018- 15/12/2022), full time.
- Senior Engineer, Ayon Al saba construction company, Baghdad, Iraq, (2009-2011), full time.

### **4. Current Membership in Professional Organizations:**

- Iraqi Engineers Union.

### **5. Service Activities**

- Member of Quality Assurance Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2023 – present).
- Member of Examination Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2024 – present).
- Member of Bologna Quality Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2023 – present).

## Curriculum Vitae

**Name:** Alaa Hussein Abdulaal

### 1. Education:

- PhD., Electrical Engineering, Urmia University, West Azerbaijan, 2024
- M.Sc., Electrical and Electronics Engineering, Istanbul G University, Turkey, 2021
- B.Sc., Electrical Engineering, Al-Mustansiriya University, Iraq, 2017

### 2. Academic Experience:

Lecturer, College of Engineering, Al-Iraqia University, (2023 – present), Full time.

Assist Lecturer, Department of Medical Instrumentation Technique Engineering, Ashur University, (2021-2023), Full time

### 3. Non-Academic Experience:

- None

### 4. Certifications or Professional Registrations:

- None

### 5. Current Membership in Professional Organizations:

Iraqi Engineers Union  
Iraqi Academic Union

### 6. Honors and Awards:

- Best PhD. student award with thesis distinction, Faculty of Electrical and Computer Engineering, Urmia University, West Azerbaijan, 2024.
- Best M.Sc. student award, Faculty of Engineering, Istanbul G University, Turkey, 2021.

### 7. Principal Publications and Presentations of Past Five Years:

- "A self-learning deep neural network for classification of breast histopathological images." Biomedical Signal Processing and Control 87 (2024): 105418.
- "Detection of epileptic seizure using EEG signals analysis based on deep learning techniques." Chaos, Solitons & Fractals 181 (2024): 114700.
- "Developing and Implementing an IoT Managed by Electronic Devices for Covid Patient Monitoring via a Secured Communication System." Sakarya University Journal of Science 28.1 (2024): 85-100.
- "Enhancing Breast Cancer Classification using a Modified GoogLeNet Architecture with Attention Mechanism." Al-Iraqia Journal for Scientific Engineering Research 3.1 (2024): 47-63.
- "Cybersecurity Determinants in Iraq's Digital Workplace: Attitude, Policy, and Compliance Roles." International Journal of Cyber Criminology 17.2 (2023): 1-19.
- "Cybercrime Laws in Iraq: Addressing Limitations for Effective Governance." International Journal of Cyber Criminology 17.2 (2023): 33-47.
- "NM-LEACH: A novel modified LEACH protocol to improve performance in WSN." International Journal of Communication Networks and Information Security 14.1 (2022): 1-10.

- "Electricity Demand Prediction by a Transformer-Based Model." Majlesi Journal of Electrical Engineering 16.4 (2022): 97-102.
- "Motion control of Robots by using Smartphones."

#### **8. Service Activities**

- Journal Reviewer: IEEE Access, Computers & electrical engineering, Journal of cyber security technology

#### **9. Professional Development Activities:**

- Participation in conferences, seminars, workshops, system/material/lab development, etc.

## Curriculum Vitae

**Name:** Wassan Saad Abduljabbar Hayale

### 1. Education:

- PhD, Electrical and Computer Engineering, University of Denver, CO, USA, 2020
- MSc, Computer Engineering, AL Nahrain University, Baghdad, Iraq, 2008
- BSc, Computer Engineering, AL Nahrain University, Baghdad, Iraq, 2004.

### 2. Academic Experience:

- Lecturer, Electrical Engineering Department, College of Engineering, Aliraqia University, Iraq (2020-present), Full time
- PhD Candidate, Electrical and Computer Engineering Department, College of Engineering, Denver University, Colorado, USA (2014-2020), Full time
- Assistant Lecturer, Al-Iraqiya University/ College of Administration and Economics/Business Administration Department, Iraq (2012-2014), Full time

### 3. Non-Academic Experience:

- SCADA Software Engineer, Almaari Control center/Iraqi Ministry of Electricity, Baghdad, Iraq (2011-2012), Full time
- Software Engineer, Northern Control Centre/ Iraqi Ministry of Electricity, Mosul, Iraq (2008-2011), Full time\

### 4. Certifications or Professional Registrations:

- TOEFL.
- GRE
- IELETS

### 5. Current Membership in Professional Organizations:

- Iraqi Engineers Union
- Institution of Electrical and Electronics Engineers (IEEE)

### 6. Honors and Awards:

- Several acknowledgement certificates from the dean of the College of Engineering, Al-Iraqia University, Baghdad, Iraq.
- Several acknowledgement certificates from the dean of the College of Business Administration, Al-iraqia University, Baghdad, Iraq.

### 7. Principal Publications and Presentations of Past Five Years:

- "Efficient Cybersecurity Assessment Using SVM and Fuzzy Evidential Reasoning for Resilient Infrastructure", Publication: **Ingénierie des Systèmes d'Information (ISI)**, volume 29, Number 2, April 2024, By IIETA.
- "Deep Siamese Neural Networks for Facial Expression Recognition in the Wild" - Published in IEEE Transactions on Affective Computing, Volume 14, Number 2, in the year 2023 by IEEE.
- "Facial Expression Recognition Using Deep Siamese Neural Networks with a Supervised Loss function" - Presented at the 2019 14th IEEE International Conference on Automatic Face & Gesture Recognition, published by IEEE.

- "Implementing Virtual Private Network using Isec Framework" - Published in the INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT), Volume 3, Number 8, in the year 2014 by IJERT.

## **8. Service Activities**

- Journal Reviewer: Contributed as a reviewer for various IEEE conferences including the IEEE Symposium Series on Computational Intelligence, IEEE International Conference on Systems, Man, and Cybernetics (SMC) in 2021 and 2022, Winter Conference on Applications of Computer Vision (WACV), and served as a Manuscript Reviewer for IEEE Transactions on Affective Computing, as well as participating in peer review activities for the Association for the Advancement of Artificial Intelligence (AAAI) Conference, Computer Vision and Pattern Recognition (CVPR), and International Conference on Computer Vision (ICCV) in the years 2019 and 2020.
- College Committees: held roles in several committees at Aliraqia University's College of Engineering and College of Administration. These include serving on examination, promotions, grading audit, attendance, and project examination committees within the Electrical and Business Administration Departments. Additionally, I've acted as an internal examiner for final-year BSc student projects for Business Administration college.

## **9. Professional Development Activities:**

- Hosted a session on "Code and Learn Together Using Github" at the Electrical Department, College of Engineering, Aliraqia University, in the 2022/2023 academic year.
- Conducted a seminar on "Machine Learning with TensorFlow and Keras" within the Electrical Department, College of Engineering, Aliraqia University, for the academic year 2022/2023.
- Presented a lecture titled "Development of Robots over the time" at the Business Administration Department, College of Administration, Aliraqia University, for the 2020/2021 academic year.
- Participated as a presenter at the 2018 Denver University Research and Performance Summit (DURAPS) Research Expo, where I showcased a poster titled "Video-based Facial Expressions Recognition using Siamese Neural Network."
- Presented a research poster titled "Video-based Facial Expressions Recognition using Siamese Neural Network" at the First International Workshop on Adaptive Shot Learning for Gesture Understanding and Production in 2017.
- Organized a "Poster Fair about Information Theory and Coding" with the participation of students at Aliraqia University, in the 2022/2023 academic year.
- Facilitated a panel discussion on "Essential Skills for Fresh Graduates Entering the Job Market" at the Electrical Department, College of Engineering, Aliraqia University, in the 2022/2023 academic year.

## Curriculum Vitae

**Name:** Ayad Mahmood Kwad

### 1. Education:

- PhD, Mechatronic engineering, Electrical engineering Faculty, Universiti Tun Hussien Malaysia, Johor, Malaysia, 2022.
- MSc, Mechatronics engineering, Al-Khwarizmi engineering, Baghdad University, Baghdad, Iraq, 2012.
- BSc, Mechatronics engineering, Al-Khwarizmi engineering, Baghdad University, Baghdad, Iraq, 2001.

### 2. Academic Experience:

- Senior lecturer, College of engineering, Al-Iraqia University, (2022 - present), full time.
- Assistant lecturer, College of engineering, Al-Iraqia University, (2013 - 2017), full time.

### 3. Non-Academic Experience:

- Internet unit director, Al-Iraqia University, (2006 - 2013), full time.
- Computer maintenance engineering, Al-Iraqia University, (2004 - 2006), full time.
- Operation systems and software lecturer, Al-Harthia institute, (2003 – 2004), part time.

### 4. Certifications or Professional Registrations:

- Mathematical modeling, simulation and design of experiments in technical processes, University Salahddin-Hawler, DAAD organization, Iraq, 2012.

### 5. Current Membership in Professional Organizations:

- Iraqi Engineers Union.

### 6. Honors and Awards:

- Scientific Creativity Award of Baghdad University for the Best Master Thesis, Baghdad, Iraq, 2013.

### 7. Principal Publications and Presentations of Past Five Years:

- A novel mechatronic absorber of vibration energy in the chimney, Energy Harvesting and Systems, 2024, De Gruyter.
- Development of Rechargeable Lawn Mower, 2023, International Journal of Electrical, Energy and Power System Engineering.
- A Comparison of Real-time NARX Models with Feedback from Real and Estimated Output, 2023 8th International Conference on Instrumentation, Control, and Automation (ICA), IEEE.
- Improving the machined surface of AISI H11 tool steel in milling process, 2021, J. Mech. Eng. Res. Dev.
- Online Nonlinear Series-Parallel Hammerstein Model for Bi-directional DC Motor, Proceedings of the 12th National Technical Seminar on Unmanned System Technology 2020: NUSYS'20, Springer Singapore.
- A Real-Time Nonlinear Hammerstein Model for Bidirectional DC Motor Based on Multi-Layer Neural Networks, 2020 IEEE Student Conference on Research and Development (SCoReD), IEEE.

- A Nonlinear Model for Online Identifying a High-Speed Bidirectional DC Motor, 2020, Engineering Journal (EJ).
- Development of system identification from traditional concepts to real-time soft computing based, 2020 IOP Conference Series: Materials Science and Engineering, IOP Publishing.

#### **8. Service Activities**

- Reviewer in ISA transaction journal

#### **9. Professional Development Activities:**

- Participate in some conferences in and outside Iraq, undergraduate students' seminars.

## Curriculum Vitae

**Name: Asmaa Falih Jassm**

### **1. Education:**

- Msc Islamic Belief and Thought AL- Iraqia University 2020
- Bsc Islamic Belief and Thought AL- Iraqia University 2008

### **2. Academic Experience :**

- Computer Engineering Department , College of Engineering, Al-Iraqia University , Iraq, Senior Lecturer, (2021- Present) .
- Electrical Engineering Department , College of Engineering, Al-Iraqia University , Iraq , Senior Lecturer, (2023- Present), Full time.

### **3. Non-Academic Experience :**

None

### **4. Certifications or Professional Registrations :**

None

### **5. Principal Publications and Presentations of Past Five Year :**

None

### **6. Service Activities**

- I practiced administrative work at the presidency of the Iraqi University until I was promoted to the job title (Assistant Director)
- Scientific, Examination, Quality Assurance Committees, and many others.

### **7. Professional Development Activities :**

- Iraqi University in- 31\5\2023 College of Engineering Workshop Adopting the Bologna path in Iraqi universities.
- Iraqi University in – 31\10\2023 college of Engineering Workshop the importance of teamwork mechanisms and results
- Iraqi University in \_24\4\2024 College of Engineering workshop on how to write a CV

## **Curriculum Vitae**

**Name: Suhail Najm Abdullah**

### **1. Education:**

- PhD, Electrical Engineering, School of Electrical Engineering, University of Technology (UTM), Malaysia.
- M.Eng., Electronics and Telecommunication Engineering, Faculty of Electrical Engineering, University of Technology (UTM), Malaysia.
- BSc., Computer and Communication Engineering, University of Technology (UTM), Malaysia.

### **2. Academic Experience:**

- Lecturer in the Department of Electrical Engineering, Al-Iraqia University. 2024 - up to now.
- Lecturer in Middle Technical University / Baghdad Institute of Technology, Department of Information and Communications Technology. 2023
- Lecturer in the Department of Medical Instrumentation Techniques Engineering at Al-Rashid University College. 2022
- Department coordinator in the Department of Medical Instrumentation Techniques Engineering at Al-Rashid University College, Iraq (2022).
- President of Post-Graduate Student Society (PGSS), Faculty of Electrical Engineering, UTM, 2016.

### **3. Non-Academic Experience:**

- Developer for learning and teaching Arabic Language e-content in the English language aligned with the state of Johor curriculum in Malaysia; under EDESS Education Development and Solutions Specialist Sdn. Bhd. 2020-2021
- Back-end web technology instructor, EDESS Education Development and Solutions Specialist Sdn. Bhd. 2018-2019

### **4. Certifications or Professional Registrations:**

- IEEE member.

### **5. Current Membership in Professional Organizations:**

- Member of Iraqi Engineering Union.
- Member of Iraqi Academics Syndicate.

### **6. Honors and Awards:**

- Best postgraduate student award for the Faculty of Electrical Engineering, 2016.

- Best Presenter Award at the IGCESH 2016 Global Postgraduate Conference in Malaysia for my outstanding contribution.
- Certificate of appreciation for achieving the third-highest rank in the teaching methods and educational qualification course, University of Technology, Iraq.

### **7. Principal Publications and Presentations of Past Five Years:**

- Abdullah, Suhail N., Kok Y. You, Cheong Y. Chong, Hesham A. El-Enshasy, Mohamed S. Mohamed Ali, Noor A. Zainol, Alyaa H. Ismael, and Cheng S. Khe. "Optimisation of Heating uniformity for milk pasteurisation using microwave coaxial slot applicator system." *Biosystems Engineering* 215C: 271-282, 2022.
- Al-Heety, Ahmed Thair, et al. "On the Performance of mm-Wave Massive MIMO Multi-Carrier Modulation Technique for Vehicle-to-Vehicle Communication." 2022 International Conference on Artificial Intelligence of Things (ICAIoT). IEEE, 2022.
- You, Kok Yeow, Man Seng Sim, and Suhail Najm Abdullah. "Emerging Microwave Technologies for Agricultural and Food Processing." In *Precision Agriculture Technologies for Food Security and Sustainability*, pp. 94-148. IGI Global, 2021.

### **8. Service Activities**

- Journal Reviewer: Tikrit Journal of Engineering Sciences.

### **9. Professional Development Activities:**

- Participation in the IGCESH 2016 conference in Malaysia.
- Participation in the International Conference on Artificial Intelligence of Things (ICAIoT), IEEE Turkey.

## **1. Curriculum Vitae**

**Name: Ahmed Naji Zaidan**

## **2. Education:**

- MSc, Master of Electrical Engineering, Faculty of Electrical and Electronic Engineering 2019.
- BSc, Electrical Engineering, University of Technology, Baghdad, Iraq, 2009.

## **2. Academic Experience:**

- Assistant Lecturer, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (10/04/2023 – present), full time.
- Lecturer at the College of the Dijlah/division of laboratories and engineering workshops (1/8/2009 to 1/12/2009).

## **3. Non-Academic Experience:**

- Motor maintenance engineer at Hyundai Motor in electric cars department (4/12/2009 to 10/1/2010), full time.
- Team leader at Alassad scientific bureau for medical equipment, (10/3/2010 to 1/1/2013), full time.
- Team leader at Elite International scientific bureau for medical equipment, (5/1/2013 to 25/4/2014), full time.
- Sales Manager at GE Healthcare (Asur scientific bureau), (1/5/2014 to 29/9/2014), full time.
- Team leader at Philips Healthcare (Al-Bahja Trading company) in IXR Department, (1/10/2014 to 1/3/2017), full time.

## **4. Current Membership in Professional Organizations:**

- Iraqi Engineers Union.

## **5. Principal Publications and Presentations of Past Five Years:**

- Mohammed, Ali Jasim, et al. "Impact of Rain Weather Conditions over Hybrid FSO/58GHz Communication Link in Tropical Region." *Al-Iraqia Journal for Scientific Engineering Research* 3.3 (2024): 117-134.
- Yaakub, Muhamad Faizal, et al. "Influence of Parasitic Elements on Flyback Converter at High Switching Frequency Operation: A Comprehensive Analysis."
- Zaidan, Ahmed Naji, et al. "Multilevel PV-grid NPC inverter based artificial neural network maximum power point tracking technique." 2022 IEEE Industrial Electronics and Applications Conference (IEACon). IEEE, 2022.
- Zulkifli, Shamsul Aizam, et al. "Investigation of Multilevel Inverter for the Next Distributed Generation Using Low-Cost Microcontroller." *International journal of electrical and computer engineering systems* 10.1. (2019): 11-18.

## **6. Service Activities**

- Member of Examination Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2024 – present).

- Member of Bologna Quality Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2023 – present).
- Member of Iso 50001 Energy Mangment Committee, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq, (2025 – present).

## Curriculum Vitae

**Name:** Shahad Talib Armoot

### **1. Education:**

- MSc, Electronics and Communication Engineering, University of Mustansiriyah, Iraq, 2021.
- BSc, Electrical Engineering, University of Mustansiriyah, Iraq, 2014.

### **2. Academic Experience:**

Assesstet Lecturer, Al-Iraqia University, College of Engineering, (2023 to present)

### **3. Non-Academic Experience:**

### **4. Certifications or Professional Registrations:**

None

### **5. Current Membership in Professional Organizations:**

None

### **6. Honors and Awards:**

None

### **7. Principal Publications and Presentations of Past Five Years:**

- Temperature analysis and Richardson constant dependent characteristics of planar ZnO Schottky diode grown by hydrothermal method ,ST Armoot, GM Ali - AIP Conference Proceedings, 2021
- Nanorods ZnO thin film grown by hydrothermal method based planar and vertical PD/ZnO Schottky diode configurations ,GM Ali, ST Armoot - Journal of Engineering and Sustainable Development ..., 2020.
- Monocrystalline ZnO Nanorods Thin-film based Schottky Barrier Diode ,ST Armoot, GM Ali - 2022 IEEE 22nd International Conference on ..., 2022.

### **8. Service Activities:**

- Department Committees, Department Council.
- Teaching BSc.
- Supervising BSc projects.

### **9. Professional Development Activities:**

None

# 1. Curriculum Vitae

**Name:** Firas Ali Jawad

## 1. Education:

- PhD, Electrical and Electronics Engineering, University of Canterbury, Christchurch, New Zealand, 2014
- MSc, Computer and Control Engineering, University of Baghdad, Baghdad, Iraq, 1993
- BSc, Electrical Engineering, University of Baghdad, Baghdad, Iraq, 1988

## 2. Academic Experience:

- Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Lecturer, 2023-till now, full time
- Communication and Electronics Engineering Department, College of Engineering, Uruk University, Baghdad, Lecturer, 2017-2023, full time
- Mechatronics Engineering Department, Al-Khwarizmi College of Engineering, University of Baghdad, Baghdad, Assistant Lecturer, 2003-2008, full time
- Electrical Engineering Department, College of Engineering in Haun, Libya, Lecturer, 1989-1998, full time
- Electrical Engineering Department, College of Engineering, University of Baghdad, Baghdad, External Lecturer, 1994-1996, part time

## 3. Non-Academic Experience:

- Embedded system programmer, TracMap company, Christchurch, New Zealand, 2014-2017, full time

## 4. Certifications or Professional Registrations:

None

## 5. Current Membership in Professional Organizations:

Iraqi Engineers Union

## 6. Honors and Awards:

None

## 7. Principal Publications and Presentations of Past Five Years:

- Firas Al-Hasani, "Developing a combinatorial model for the multiple constant multiplication" *International Journal of Engineering & Technology* 4 (4), 472, 2015.
- Firas Al-Hasani; Michael P. Hayes; Andrew Bainbridge-Smith, "A Common Subexpression Elimination Tree Algorithm" *IEEE Transactions on Circuits and Systems I: Regular Papers* 60 (9), 2389-2400, 2011.
- Firas Al-Hasani; Michael P. Hayes; Andrew Bainbridge-Smith, "A Common Subexpression Elimination Tree Algorithm" *IEEE Transactions on Circuits and Systems I: Regular Papers* 60 (9), 2389-2400, 2011.

## 2. Curriculum Vitae

**Name:** Marwah Malik Hassooni

## 8. Education:

- Msc, Electronic and Com. Eng., University of Al-Nahrain, Baghdad, Iraq, 2015
- BS, Electronic and Com. Eng., University of Al-Nahrain, Baghdad, Iraq, 2011

## 9. Academic Experience:

**College of Engineering / Bilad Al-Rafidain College – Iraq** Assistant Lecturer, 2017

- Electrical Power Techniques Engineering Department
- Computer Techniques Engineering Department

**Uruk University, Baghdad – Iraq** Assistant Lecturer, 2018

**College of healthy and medical technology**

- Optical Technique Department
- Prosthodontics Techniques

**College of Law**

**College of Engineering**

- Department of Electronic and Communications Engineering

**Document Issuance & Validity Unit** Manager, 2019

## 10. Certifications or Professional Registrations:

None

## 11. Principal Publications:

- Marwah M. Hassooni, Al-Shalich Abbas. "Harmonic Distortion In The Flow Signals Of Externally Mounted Capacitive Spatial Filter" *Nahrain University College of Engineering Journal* 19 (1), 92-97
- MM Hassooni, JS Aziz, AQ Hameed, " Ultra-Miniaturized Spiral Antenna for Loop Recorder Implantable Device " *Progress In Electromagnetics Research M* 132, 21-30,20

### 3. Curriculum Vitae

1. **Name:** Mustafa Subhi Kamal

2. **Education:**

- PhD, Communication. Eng. UTHM, Malaysia, 2020
- MEng, Communication Eng., Al Mustansiria University, 2006
- BS, electronic and communication Eng., University of Mosul, Iraq, 1990

3. **Academic Experience:**

Qualification and work experience:

BSc. Mosul University 1990

Engineer in Iraqi ministry of industry

MSc. Almustansiriya university 2006

Researcher in ministry of science and technology-Iraq

Lecture in aliraqi university Iraq-Ph.D. from university tun Hussein on Malaysia

4. **Non-Academic Experience:**

Consultant for many governmental industries

5. **Certifications or Professional Registrations:**

None

6. **Current Membership in Professional Organizations:**

Iraqi Engineers Union

7. **Honors and Awards:**

Many in ministry of industry and Almustansiriya, Iraqiya universities.

8. **Principal Publications and Presentations of Past Five Years:**

- FPGA Based Adaptive CFAR Processor for Non-Homogeneous Radar Environments
- Multi-Target. Detection in Cutter-Edge environments using modified GOCFAR
- MS Kamal International Journal of Scientific & Engineering Research 7 (12) 4
- New algorithm for multi targets detection in clutter edge radar environments
- MS Kamal, J Abdullah
- Indonesian Journal of Electrical Engineering and Computer Science 18 Adel A. Eidan, Saleh E. Najim, and Jalal M. Jalil, "An Experimental and a Numerical Investigation of HVAC System Using Thermosyphon Heat Exchangers for Sub-tropical climates," *Applied Thermal Engineering*, Vol.114 (2017), pp.693–703, 2017.

9. **Service Activities:**

- Maintenance of computers and microprocessor lab in Al Mustansiriya University.
- Construct the LAB equipment for college of engineering in Iraqiya university (2013- 2014)

10. **Professional Development Activities:**

- Researcher in ministry of science and Technology (2005-2013)  
Engineer and researcher in ministry of industry (1990-1997)

# 1. Curriculum Vitae

**Name:** Hala Kamal Abduljaleel

## 1. Education:

- MSc in Electrical Engineering, University of Technology, Iraq, 2020
- BSc in Electrical Engineering, University of Technology, Iraq, 2015

## 2. Academic Experience:

- **Assistant Lecturer**, Medical Instruments Technology Engineering Department, Al-Mansour University College, Baghdad, Iraq  
*2020–2023*  
Full-time position
- **Assistant Lecturer**, Electrical Engineering Department, College of Engineering, Al-Iraqia University, Baghdad, Iraq  
*2023–Present*  
Full-time position

## 3. Publications:

1. *Conception and Realization of a Wideband Directional Dual-Beam Phased MIMO Array Antenna with Hybrid Coupler for ISM Band Utilizations*, **Electromagnetics Academy**, Volume 132, Pages 39-48, 2025, Published in **Progress in Electromagnetics Research M**.
2. *Wireless power transfer-based single layer inductive coupling for biomedical implantable devices*, **AIP Conference Proceedings**, Volume 3232, 5th Scientific Conference for Electrical Engineering.
3. *Deep CNN-based skin lesion image denoising and segmentation using active contour method*. **Engineering and Technology Journal**, Volume 37, Issue 11, 2019, Published by **Techniques Research, EETR**.
4. *Detection and classification of skin lesion-based neural networks*, *International Conference on Engineering and Emerging Technologies (ICT)*, 2021, IEEE.
5. *Survey of near-field wireless communication and power transfer for biomedical implants* **Engineering and Technology Journal**, Volume 43, 2024, Published by **University of Technology**.

## 4. Curriculum Vitae

**Name:** Waleed Salman Mohammed

### 12. Education:

- PhD, Mechanical Eng., University of Southwest Jiaotong, Chengdu, China, 2024
- MEng, Mechanical Eng., University of Southwest Jiaotong, China, 2017
- BS, Mechanical Eng., University of Al-Mustansiriya, Baghdad, Iraq, 2001-2002

### 13. Academic Experience:

- Manager at Computer and Internet Center (2012-2013)
- Assistant lecturer, Electrical Eng. Dept (2018-2019)
- Scientific Assistant to Head Department, Electromechanical Eng. Dept. (2006-2012)
- University of Al-Iraqia, Baghdad, Teacher, 2024-present, full time

### 14. Non-Academic Experience:

Mercury Computers Company's maintenance manager, Baghdad, Iraq

### 15. Certifications or Professional Registrations:

- ToT, National Democratic Institute for International affair, Erbil, Iraq

### 16. Current Membership in Professional Organizations:

Iraqi Engineers Union

### 17. Honors and Awards:

- Ministry award of the Science Day of innovators and creators, Minister of Higher Education, Iraq. (2020)
- Ministry award of high publications of papers outside Iraq in 2022.

### 18. Principal Publications and Presentations of Past Five Years:

- Salman, Waleed, et al. "A novel energy regenerative shock absorber for in-wheel motors in electric vehicles." *Mechanical Systems and Signal Processing* 181 (2022): 109488.
- Salman, Waleed, et al. "A novel mechatronic absorber of vibration energy in the chimney." *Energy Harvesting and Systems* 11.1 (2024): 20230022.
- Salman, Waleed, et al. "A dual-kinetic energy harvester operating on the track and wheel of rail deceleration system for self-powered sensors." *Smart Materials and Structures* 32.12 (2023): 125023.
- Salman, Waleed, et al. "A high-efficiency energy regenerative shock absorber using helical gears for powering low-wattage electrical device of electric vehicles." *Energy* 159 (2018): 361-372.
- Salman, Waleed, et al. "A high-efficiency energy regenerative shock absorber using helical gears for powering low-wattage electrical device of electric vehicles." *Energy* 159: 361-372.
- Zhang, H., Zhang, Z, Salman W, et al. "Parameter optimization method of contra-rotating vertical axis wind turbine: Based on numerical simulation and response surface." *Journal of Cleaner Production* 435 (2024): 140475.

- Tairab, Alaeldin M., et al. "The Nexus of IoT technology: A renewable multi-module energy harvester for self-powered on railway." *Sustainable Materials and Technologies* 38 (2023): e00752.

**19. Patent:**

- Utility model patent (Authorization-number 201710149066), China.
- Utility model patent (Authorization-number.17821793), China

**20. Service Activities:**

**University:**

- Journal Reviews: *Applied Energy*, *Energy*, USA,

**21. Professional Development Activities:**

- Designer in Lab M Eng. professor Dr Zhang in Southwest Jiaotong University, China