



## DR. YASEEIN SOUBHI HUSSEIN AL-HAMADANI

**Position** : Assistant Professor  
**Address** : Department of Information Systems and Computer Science  
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### General

#### Biography

**Yaseein Soubhi Hussein** obtained the Bachelor of Science in Engineering (Electrical Engineering) degree from the University of Baghdad, Iraq, in 1999. He then received his Master degree in Telecommunications Engineering from University of Malaya, Malaysia, in 2010 and PhD in Communication and Networks Engineering, Universiti Putra Malaysia in 2014. He is currently a Assistant Professor at Department of Information Systems and Computer Science, Ahmed Bin Mohammed Military College (ABMMC), Doha, Qatar. His main research interests are Computer Networking technology, 6G Networks, Visible light communication (VLC) known as (Li-Fi) for Internet of Things (IoT), wireless communication and networking, LTE-Advanced networks and 5G Millimetre wave technology (mm-Wave).

#### Current Affiliation

**Assistant Professor** at Department of Information Systems and Computer Science, Ahmed Bin Mohammed Military College, Qatar.

#### Main duties:

- Developing several modules according to Bloom's taxonomy to achieve planned learning outcome for Outcome-based education (OBE)
- Teaching undergraduate and postgraduate levels
- Prepare and develop assessments, tutorials and assignments
- Publish a good research paper in ISI journals
- Organize seminars, workshops and industrial visit
- Contribution to society

#### Education Background

**1994-1999:** Bachelor of Science in Engineering (Electrical Engineering), University of Baghdad, Iraq

**2008-2010:** Master of Engineering in Telecommunication, University of Malaya, Malaysia. Thesis title: "Investigation on Amplification and Non-Linear Characteristics of Semiconductor Optical Amplifier"

**2010-2014:** Doctor of Philosophy (Ph.D.), in Communications & Networks Engineering Universiti Putra Malaysia, Malaysia. Thesis title: "Mobility Management Schemes Based on Multiple Criteria for Optimization of Seamless Handover in Long Term Evolution (LTE) Networks"

## Award and Recognition

1. **2015:** Bronze Medal, Invention & Innovation Awards 2015, Malaysia Technology Expo 2015, 12-14 February 2015, Kuala Lumpur for the invention/innovation of “AILAUT – Advance Internet Light Application Underwater Transmission”
2. **2015:** Silver Medal Kuala Lumpur for the invention/innovation of “AILAUT – Advance Internet Light Application Underwater Transmission”, 26th International Invention & Innovation Exhibition (ITEX '15) 21st – 23rd May 2015, KLCC
3. **2017:** Best Paper Award at the 2017 IEEE 13th Malaysia International Conference on Communications (MICC) for the paper “PAPR Reduction of DC Biased Optical OFDM using Combined Clipping and PTS Techniques”
4. **2018:** Silver Medal, Research Innovation Commercialization & Entrepreneurship Showcase (RICES) 2018, “Time and Frequency Offset and Channel Estimation Algorithms for OFDM-based Vehicular Multi-Relay Networks”, 15 November 2018, MMU.

## Working Experience

1. **Assistant Professor**, Department of Information Systems and Computer Science, Ahmed Bin Mohammed Military College, Qatar (06 Nov 2019 - present)
2. **Adjunct Professor**, Assistant Professor, Community College of Qatar, Information Technology Department, Qatar (Spring 2021, Fall 2021, Spring 2022, Fall 2022).
3. **Senior Lecturer** at Faculty of Computing, Engineering and Technology, Asia Pacific University of Technology & Innovation (APU), Malaysia, (15 Aug 2017 – 20 Oct 2019)
4. **Postdoctoral Research Fellow** at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (01 Jul 2016 – 31 Jul 2017)
5. **Postdoctoral Researcher** at Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Malaysia (01 Sep 2015 – 30 Jun 2016)
6. **Consultant** at Research and Development center of innovation for Telekom Malaysia Berhad (TM), (TM R&D), Malaysia (01 Jan 2015 – 31 Aug 2015)
7. **Research Assistant** at Faculty of Engineering, Universiti Putra Malaysia (UPM), Malaysia (20 Sep 2012 – 31 Dec 2014)
8. **Research Assistant** at Faculty of Engineering, University of Malaya (UM), Malaysia (02 Jul 2009 – 31 Jan 2010)
9. **Lecturer** (Adjunct staff) at Department of Electrical, Anbar Technical Institute, Iraq (03 Sep 2000 – 21 Jun 2006)
10. **Engineer/ Deputy Production Manager** at Al-Shaheed State Company, Iraq, (23 Dec 2000 – 31 May 2007)

## Expertise

- Wireless Communication
- Computer Networks (5G, 6G)
- Visible Light Communications (VLC)
- Certified Cisco Certified Network Associate (CCNA)

# CURRICULUM VITAE

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## Computer skills

- Certified Cisco CCNA
- C/C++ programming
- Linux
- Scilab
- Simulations in MATLAB/Simulink/QualNet
- Simulations in an open source LTE-Sim

## Research and Development

### Grant

1. **Oct 2013 – September 2015** ((Role: Project Member): Light Communication (VLC) using Time Division Synchronous Code Division Multiple Access (TD-SCDMA) Scheme, CREST (RM160,000)
2. **1 January 2015 – 31 December 2015** (Role: Project Leader): A Collaboration Project with MMU-TMR&D to develop Green OFDM Platform Advanced-internet Lighting Application for AILA Campus System (O-LEILA), Telekom Malaysia Research & Development (TM R&D) (RM743,400)
3. **1 May 2017 – 30 April 2019** (Role: Project Leader): Channel Estimation for Orthogonal Frequency Division Multiplexing (OFDM) System for Visible Light, TM R&D Residual Grant(RM86,000)

## Teaching and Supervision

### Teaching Undergraduate and Postgraduate

More than seventeen year's academic experience in research and lecturing posts

1. Postgraduate Subjects: Masters in Engineering in Telecommunications:
  1. ETM7032 - Mobile Personal Communications
  2. ETM7132/ETM7136 - Digital Communication Systems and Design
  3. ETM7106 - Network Security
  4. ETM7206 – Special Topics on Emerging Technologies
  5. ETM7146 – Switching and Networking Systems
  6. CT088-3-M - Mobile and satellite communication
  7. CT070-3-M - Network Design and Performance
  8. CT098-3-M - Research methodology
  9. CT115-3-M - Data networks
2. Undergraduate subjects: Faculty of Engineering/ Information Systems and Computer Science:
  1. ECP1016 - Computer and Program Design
  2. EMM3026/ECE3266 - Digital Audio Signal Processing
  3. EHM3066 – Engineers and Society
  4. ETM2046 – Analog and Digital Communications
  5. ETM3086/ETN4086 – Mobile and Satellite Communications
  6. ECE2056 – Data Communications and Networking
  7. CT090-3-2-MWT Mobile Wireless Technology

8. EE005-3-1 Engineering Mathematics 2
9. CT064-3-3-AWT Advanced Wireless Technology
10. CT063-3-2 Computer Architecture
11. CT120-3-2 LoWPAN Ad-Hoc Networks
12. CT046-3-3-NWT Network Troubleshooting
13. CT098-3.5-2-RMCT Research Methods in Computing and Technology
14. CT109-3-2-DCI Data Center Infrastructure
15. CT043-3-1 Introduction to Networking
16. AQ007-3-1 Discrete Mathematics
17. 2505-222 Discrete Mathematics
18. 2510-316 Computer Network
19. 2505-221 Programming Concepts (JAVA)
20. 2505-321 Fundamentals of Database Systems
21. 2505-104 Fundamentals of Information Systems
22. 2505-224 IT Infrastructure
23. 2505-223 Information Systems Computer
24. 2505-487 Web Services and Distributed Computing

## Supervision Postgraduate

### Completed

- 1 PhD (Role: Main supervisor, 2017), PhD in Computing, and Technology Engineering, student name: Mohammed NAZAR HUSSIEN ALSAWAF, Thesis title: Localization using GPS Coordinates in IPv6 Addresses of Wireless Sensor Network Nodes, Asia Pacific University of Technology & Innovation (APU), Malaysia.
- 2 PhD (Role: Main supervisor) 2018, PhD in Computing, student name: MAMOUN AL-HADIDI, Thesis title: An Enhanced Hybrid Model for designing and implementing the Enterprise Resource Planning systems in Organizations in Jordan, Asia Pacific University of Technology & Innovation (APU), Malaysia.
- 3 Master (Role: Main supervisor) 2018, M.sc. in Software Engineering, Student name: ABDUL GADIR SHAFEE RIZA, Title: An Analysis of Maldives Banking Application on android platform as Security perspective. Asia Pacific University of Technology & Innovation (APU), Malaysia.
- 4 Master (Role: Main supervisor) 2019, M.sc. in Software Engineering, student name: BASEL KASIS, thesis title: An Evaluation Study of Achieving Data Security with The Cloud Computing Adoption Using System Development Methodology. Asia Pacific University of Technology & Innovation (APU), Malaysia.
- 5 Master (Role: Main supervisor) 2019, M.Sc. in Technology Management, Student name: OLUWABIYI AKINKUNMI ADEGUNWA, Thesis title: An Approach to Higher Education In The Fourth Industrial Revolution: Adoptable Educational Technologies For Higher Education. Asia Pacific University of Technology & Innovation (APU), Malaysia.

## **Under Supervision:**

- 1 PhD (Role: Co-supervisor), 2020, PhD in Communication Engineering, student name: QASIM MOHAMMED KHALAF, thesis title: Multi-tone FSK modulation for SWIPT with AWGN channel. University PUTRA Malaysia, Malaysia.
- 2 PhD (Role: Co-supervisor), 2021, PhD in Communication Engineering, student name: HIKMAT MAAD, Thesis title: channel estimation based Forward Error Correcting code with Reed Solomon (RS) Encoder/Decoder in VLC Networks. University PUTRA Malaysia, Malaysia.

## **Academic Recognition and Leadership**

### **Assessor and Examiner**

#### **External Examiner for Thesis**

1. Ph.D Thesis examiner, 2020, “Investigation of Innovative Techniques to Acquire Lower Peak Average Power Ratio (PAPR) in 5G Systems”, International Islamic University Malaysia (IIUM)
2. Ph.D Thesis examiner, 2019, “Data Redundancy Reduction Scheme on Data Aggregation in Wireless Sensor Network”, Universiti Utara Malaysia (UUM)
3. Master, Thesis examiner, 2015, M.sc. in Communication Engineering, student name: Chan Huan Len, Thesis title: An investigation and Performance analysis of DCO-OFDM in VLC system, Multimedia University, Malaysia.
4. Master Thesis examiner, 2020, M.Sc. in Communication Engineering, student name: Sherine Saadun Jumaa, Thesis title: channel estimation based Forward Error Correcting code with Reed Solomon (RS) Encoder/Decoder in VLC Networks. Tikrit University, Iraq.

### **Referee and Evaluation Committee**

#### **Referee Articles/Journals/Academic Papers Technical/Scientific Evaluation Committees**

1. Reviewer for IEEE Access
2. Reviewer for ICOIN 2012
3. Reviewer for Scientific Research and Essays
4. Reviewer for EURASIP Journal on Wireless Communications and Networking
5. Reviewer for Journal of Systems and Software
6. Reviewer for IEEE International Conference on Networks (ICON) 2017
7. Reviewer for ICT-MICC 2015
8. Reviewer for ETRI Journal
9. Reviewer for IEEE Transactions on Communications
10. Reviewer for Wireless Personal Communications (WPC)
11. Reviewer for Transactions on Internet and Information Systems (TIIS)
12. Reviewer for Transactions on Emerging Telecommunications Technologies (ETT)

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13. IEEE PIMRC (Personal, Indoor and Mobile Radio Communications 2014)
14. IEEE Global Communications Conference (GLOBECOM)
15. International Conference on ICT convergence (ICTC)

## Computer Skills

- Certified Cisco CCNA
- C/C++ programming
- Linux
- Scilab
- Simulations in MATLAB/Simulink/QualNet
- Simulations in an open source LTE-Sim

## Citation

As of 28th October 2023, from Google Scholar ([yaseein73@gmail.com](mailto:yaseein73@gmail.com)):

Citation: 316

H-index: 10

## links

Google Scholar: <http://scholar.google.com.my/citations?user=1rJw-d0AAAAJ>

Researcher ID Link: <http://www.researcherid.com/rid/J-1615-2017>

Scopus ID Link: <https://www.scopus.com/authid/detail.uri?authorId=55064763600>

LinkedIn: <https://www.linkedin.com/in/yaseein-soubhi-hussein-92804a27/>

ORCID ID: <https://orcid.org/0000-0001-5044-5524>

Scopus Author ID: 55064763600

ResearcherID: J-1615-2017

## Academic and Professional Association/Bodies

Date	Institution/Professional Association/Bodies	Membership grade
1999–present	Iraqi Engineers Union	Senior Member
2009–present	IEEE Institute of Electrical and Electronics Engineers	Senior Member
2009–present	IEEE Communications Society	Member
2010–present	LTE University	Member
2012–present	International Association of Engineers (IAENG)	Member
2013–present	International Association of Computer Science & Information Technology (IACSIT)	
2016–present	IET The Institution of Engineering and Technology	Senior Member MIET
2017–present	Board of Engineers Malaysia	Member

## Services to the University

1. Assistant Programme Coordinator for Optical Engineering Programme (March 2015 – March 2017)
2. Lab supervisor for Telecommunication Lab (January 2012 - December 2014)

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3. Asia Pacific University of Technology & Innovation (APU) accreditation committee member (August 2018- June 2019)
4. ABMMC, Qatar Magazine committee member (September 2-19 – Present)

## Services to the Community

1. Chairman for Centre for Broadband Communications (CBC) (April 2010-January 2011)
2. Chairman of DEng in Telecommunications Ad-Hoc Committee
3. Asia Pacific Wireless Broadband Forum 2016 Committee member
4. Faculty of Engineering e-SILK committee – January 2008-December 2009

## Publication

### Book and Chapter in Book

1. **Yaseein Soubhi Hussein**, M. Alrashd, A. S. Alabed, and A. Zraiqat, "Data Centre Infrastructure: Power Efficiency and Protection," DOI: 10.5772/intechopen.11001, 2023.
2. **Yaseein Soubhi Hussein**, M. Alrashd, A. S. Alabed, and S. Alomar, "Data Centre Infrastructure: Design and Performance," DOI: 10.5772/intechopen.109998, 2023.

### Journal

- 1 **Yaseein Soubhi Hussein**, B. M. Ali, P. Varahram, and A. Sali, "Enhanced handover mechanism in long term evolution (LTE) networks, Scientific Research and Essays Vol. 6(24), " <http://www.academicjournals.org/journal/SRE>, vol. 6, pp. 5138-5152, 2011.
- 2 **Yaseein Soubhi Hussein**, "Mobility Management Schemes Based On Multiple Criteria For Optimization Of Seamless Handover In Long Term Evolution Networks," 2014.
- 3 **Yaseein Soubhi Hussein**, B. M. Ali, M. F. A. Rasid, and A. Sali, "Reduction of Outage Probability due to Handover by Mitigating Inter-cell Interference in Long-Term Evolution Networks," ETRI Journal, vol. 36, pp. 554-563, 2014.
- 4 **Yaseein Soubhi Hussein**, B. M. Ali, M. F. A. Rasid, and A. Sali, "Handover in LTE Networks with Proactive Multiple Preparation Approach and Adaptive Parameters Using Fuzzy Logic Control," KSII Transactions on Internet and Information Systems (TIIS), vol. 9, pp. 2389 - 2413, 2015.
- 5 **Yaseein Soubhi Hussein**, B. M. Ali, M. F. A. Rasid, and A. Sali, "Handover in LTE networks with proactive multiple preparation approach and adaptive parameters using fuzzy logic," KSII Transactions on Internet & Information Systems, vol. 9, 2015.
- 6 **Yaseein Soubhi Hussein**, B. M. Ali, M. F. A. Rasid, A. Sali, and A. M. Mansoor, "A novel cell-selection optimization handover for long-term evolution (LTE) macrocell using fuzzy TOPSIS," Computer Communications, vol. 73, pp. 22-33, 2016.
- 7 A. A. Abdulkafi, M. Y. Alias, **Yaseein Soubhi Hussein**, N. Omar, and M. K. B. Salleh, "A Hybrid PAPR reduction scheme for optical wireless OFDM communication systems," KSII Transactions on Internet and Information Systems (TIIS), vol. 12, pp. 1136-1151, 2018.

- 8 **Yaseein Soubhi Hussein**, M. Y. Alias, A. A. Abdulkafi, N. Omar, and M. Salleh, "Expectation-maximization-based channel estimation algorithm for OFDM visible light communication systems," *International Journal of Engineering & Technology*, vol. 7, pp. 2638-2645, 2018.
- 9 **Yaseein Soubhi Hussein** and A. C. Annan, "Li-Fi technology: High data transmission securely," in *Journal of Physics: Conference Series*, 2019, p. 012069.
- 10 A. A. Abdulkafi, **Yaseein Soubhi Hussein**, and M. Y. Alias, "Recursive Clipping for Channel Estimation in VLC Systems," *Solid State Technology*, vol. 63, 2020.
- 11 M. A. Al-Maqri, A. M. Mansoor, A. Q. Sabri, S. D. Ravana, and **Yaseein Soubhi Hussein**, "High performing multimedia transmission approach based on QoS support and admission control over IEEE 802.11 e networks," *International Journal of Communication Systems*, vol. 33, p. e4193, 2020.
- 12 A. Fathi, **Yaseein Soubhi Hussein**, and N. A. Sabri, "Leverage Networking Tasks Using Network Programmability," *TEST Engineering & Management*, vol. 83, pp. 905 -910, 2020.
- 13 M. HADIDI, M. AL-RASHDAN, and **Yaseein Soubhi Hussein**, and Saleh Hadidi, "Comparison Between Cloud ERP and Traditional ERP," *Journal of critical reviews*, vol. 7, 2020.
- 14 **Yaseein Soubhi Hussein**, A. S. Alabed, M. A. Mafrachi, M. Alrshdan, and Q. Al-Maatouk, "Li-Fi Technology for Smart Cities," *Solid State Technology*, vol. 62, 2020.
- 15 O. salman, M. I. Aal-Nouman, z. taha, M. Q. Alsabah, and **Yaseein Soubhi Hussein**, "Multi-Diseases Dataset Composed of Medical Sensors and Text inputs: Simulated Dataset Accompanied with Codes," *Data in Brief*, vol. 1, 2020.
- 16 R. Touhami, D. Slimani, A. A. Abdulkafi, **Yaseein Soubhi Hussein**. Alias, and M. Yusoff, "Combined Envelope Scaling with Modified SLM Method for PAPR Reduction in OFDM-Based VLC Systems," *Journal of Optical Communications*, 2020.
- 17 **Yaseein Soubhi Hussein**, "Impact of Applying Channel Estimation with Different Levels of DC-Bias on the Performance of Visible Light Communication," *Journal of Optoelectronics Laser*, vol. 40, 2021.
- 18 M. I. A.-N. Omar H. Salman , Zahraa K. Taha, Muntadher Q. Alsabah , **Yaseein Soubhi Hussein**, Zahraa A. Abdelkareem, "Formulating multi diseases dataset for identifying, triaging and prioritizing patients to multi medical emergency levels: Simulated dataset accompanied with codes," *Data in Brief*, vol. 34, 2021.
- 19 O. H. Salman, Z. Taha, M. Q. Alsabah, **Yaseein Soubhi Hussein**, A. S. Mohammed, and M. Aal-Nouman, "A review on utilizing machine learning technology in the fields of electronic emergency triage and patient priority systems in telemedicine: Coherent taxonomy, motivations, open research challenges and recommendations for intelligent future work," *Computer Methods and Programs in Biomedicine*, vol. 209, p. 106357, 2021.
- 20 B. Sohail, M. e. T. E. Alrashd, **Yaseein Soubhi Hussein**, M. Tubishat, S. Ghosh, and A. S. Alabed, "Macro Based Malware Detection System," *Turkish Journal of Computer and Mathematics Education*, vol. 12, pp. 5776-5787, 2021.
- 21 **Yaseein Soubhi Hussein** and M. T. Alrashdan, "Secure Payment with QR Technology on University Campus," *Journal of Computer Science & Computational Mathematics*, vol. 12, 2022.
- 22 **Yaseein Soubhi Hussein** and M. T. Alrashdan, "Virtual Reality Systems for Exposure Therapy," *resmilitaris*, vol. 12, pp. 218-226, 2022.

## Conference Proceedings

- 1 **Yaseein Soubhi Hussein**, S. Harun, N. Awang, and H. Ahmad, "Enhancement of four wave mixing characteristic in Semiconductor Optical Amplifier using Fiber loop mirror," in 2009 International Conference for Technical Postgraduates (TECHPOS), 2009, pp. 1-3.
- 2 **Yaseein Soubhi Hussein**, B. M. Ali, and P. Varahram, "On fractional and semi-soft handover in long term evolution (LTE) networks," in The 17th Asia Pacific Conference on Communications, 2011, pp. 48-52.
- 3 A. A. Abdulkafi, M. Y. Alias, and **Yaseein Soubhi Hussein**, "Performance analysis of DCO-OFDM in VLC system," in 2015 IEEE 12th Malaysia International Conference on Communications (MICC), 2015, pp. 163-168.
- 4 **Yaseein Soubhi Hussein**, M. Y. Alias, and A. A. Abdulkafi, "On performance analysis of LS and MMSE for channel estimation in VLC systems," in 2016 IEEE 12th International Colloquium on Signal Processing & Its Applications (CSPA), 2016, pp. 204-209.
- 5 A. A. Abdulkafi, M. Y. Alias, and **Yaseein Soubhi Hussein**, "A novel approach for PAPR reduction in OFDM-based visible light communications," in 2017 International Conference on Platform Technology and Service (PlatCon), 2017, pp. 1-4.
- 6 A. A. Abdulkafi, M. Y. Alias, **Yaseein Soubhi Hussein**, N. Omar, and M. K. B. Salleh, "PAPR reduction of DC biased optical OFDM using combined clipping and PTS techniques," in 2017 IEEE 13th Malaysia International Conference on Communications (MICC), 2017, pp. 207-212.
- 7 **Yaseein Soubhi Hussein**, M. Y. Alias, and A. A. Abdulkafi, "An implementation of indoor visible light communication system using Simulink," in 2017 International Conference on Platform Technology and Service (PlatCon), 2017, pp. 1-6.