# Dr. Mutsafa Ismael Salman

# ملخص السيرة الذاتية

الأسم	مصطفى إسماعيل سلمان
الشهادة	دكتوراه - جامعة بوترا ، ماليزيا 2015
التخصص الدقيق	هندسة إتصالات الحاسبات والشبكات
اللقب العلمي	مدرس
تأريخ التعيين	2003/6/8
مكان العمل	جامعة بغداد - كلية الهندسة – قسم الحاسبات
البحوث العلمية	16 بحث نشرت في مجلات ذات معامل تأثير وفي مؤتمرات عالمية رصينة
الجوائز	6 جوائز عالمية
H-index	7
الواجبات والمهام	<ul> <li>رئيس قسم هندسة الحاسبات -2021 مستمر</li> <li>معاون عميد كلية الهندسة جامعة بغداد و 202-202</li> <li>مسؤول وحدة التعليم الالكتروني – كلية الهندسة 2018 – 2020</li> <li>مسؤول وحدة التعليم الالكتروني – كلية الهندسة 2018 – 2020</li> <li>مهام تدريسية في قسم هندسة الحاسبات للمراحل الاولية والعليا .</li> <li>الأشراف على طلاب الماجستير (4 طلاب)</li> <li>رئاسة وعضوية العديد من اللجان على مستوى القسم والكلية والجامعة ، ومن اهمها:</li> <li>رئاسة وعضوية العديد من اللجان على مستوى القسم والكلية والجامعة ، ومن اهمها:</li> <li>رئاسة وعضوية العديد من اللجان على مستوى القسم والكلية والجامعة ، ومن اهمها:</li> <li>رئيس لجنة متابعة الانترنت – رئاسة جامعة بغداد</li> <li>رئيس لجنة الجودة – قسم هندسة الحاسبات – 2012-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2018-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس لجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس اللجنة العلمية – قسم هندسة الحاسبات – 2010-2018</li> <li>رئيس اللجنة الامتحانية – قسم هندسة الحاسبات – 2010-2018</li> </ul>

# MUSTAFA ISMAEL SALMAN PhD, Computer and Communications Networks E-mail: mustafa.i.s@uob.edu.iq https://www.linkedin.com/in/mustafa-salman-7b698a18

## **Personal Statement**

For more than seven years, particularly from 2003-2010, I was employed as a senior lecturer in the Computer Engineering department, University of Baghdad, lecturing many computer and communications related subjects. Then, from Jan 2011 to May 2015, I was a full-time Ph.D. student in computer and communications engineering, University Putra Malaysia (UPM), which is one of top four research universities in Malaysia. My PhD program in wireless communication networks is conducted by course work with thesis. My PhD research mainly proposes a new energy-efficient transmission means for Green LTE cellular communications by using artificial intelligent techniques. During my doctoral research, I have published several technical articles in high impact-factor international journals. I have also participated and presented papers in many international conferences, specifically in Korea, France and Malaysia. Moreover, I have participated in many workshops, trainings and exhibitions related to my field of interest. Later, I have been nominated to be a supervisor for several postgraduate students in the field of computer and communications network. Specifically, in the field of Network virtualization, Cloud computing and Software defined Networks. In the aspect of business development, He has extensive experience in the fields of understanding sophisticated client needs and is able to weave together complex, technical solutions; presenting, planning and helping customers execute change.

# **Administerial Positions**

- Deputy Dean for Student Affairs College of Engineering, University of Baghdad Since 2020 Continued
- Director of E-learning unit College of Engineering, University of Baghdad 2017-2020.
- Head of many administerial committees (Internet, Quality Assurance..etc), University of Baghdad 2016-2018.

# Education

Name, Place, and Country	Attended From /To		Degree Destinations Obtained	Main Course of Study
University Putra Malaysia Serdang-Malaysia	01/2011	10, 2015	Ph.D.	Computer and Communications Eng Wireless Communications
University of Al-Nahrain, Baghdad- Iraq	09/2000	03/2003	M. Sc.	Modern Communications Engineering
University of Al-Nahrain, Baghdad-Iraq	09/1997	07/2000	B. Sc.	Electronic and Communication Engineering

#### Theses

1. Salman, Mustafa I., "A self-Configured link adaptation with partial feedback for green LTE cellular systems", Unpublished Doctoral Dissertation, University Putra Malaysia.

# This PhD thesis has got an "outstanding PhD. Dissertation" award by IEEE Malaysia Communications Society and Vehicular Technology Society Joint Chapter – 2015. The Certificate of Excellence is given and will be available upon request.

2. Salman, Mustafa I. (2003), "M.Sc. thesis titled: Design and implementation of packet switched spacecraft communications services protocols". Unpublished Master Dissertation, University of Al-Nahrain, IRAQ.

#### **Published Journal Papers**

- 1. Muthafer, E., Salman, M.I. (2020) "SDN-assisted Service Placement for the IoT-based Systems in Multiple Edge Servers Environment" Accepted in Journal of Computer Science, University of Baghdad. Scopus Indexed.
- 2. Salman, M. I, Shaker, S. R. (2019). "Link Failure Recovery for a Large-Scale Video Surveillance System Using a Software Defined Network". Accepted in journal of engineering, college of engineering, university of Baghdad.
- **3.** Shaker, S. R., Salman, M. I. (2019)." A Software Defined Network of Video Surveillance System Based on Enhanced Routing Algorithms". Accepted to Baghdad Science Journal, Scopus indexed with cite score 0.19.

- **4. Salman, Mustafa Ismael**, et al. "A Joint Evaluation of Energy-Efficient Downlink Scheduling and Partial CQI Feedback for LTE Video Transmission." Wireless Personal Communications 98.1 (2018): 189-211.
- 5. Salman, Mustafa Ismael, Muntadher Qasim Abdulhasan, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sali. "A Partial Feedback Reporting Scheme for LTE Mobile Video Transmission with QoS Provisioning." El-sevier-Computer Networks (2016). <u>Impact Factor JCR-2015: 1.446 (Q2)</u>
- Salman, Mustafa Ismael, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sali. "A self-configured link adaptation for green LTE downlinks transmission." *Published* in Transactions on Emerging Telecommunications Technologies (2014) (x-title: European transactions on telecommunications). <u>Impact Factor</u> <u>JCR-2015: 1.295 (Q2)</u>
- 7. Salman, Mustafa Ismael, Muntadher Qasim Abdulhasan, Chee Kyun Ng, Nor Kamariah Noordin, Aduwati Sali, and Borhanuddin Mohd Ali. "Radio Resource Management for Green 3GPP Long Term Evolution Cellular Networks: Review and Trade-offs." *Published* in IETE Technical Review Vol. 30, no. 3 (2013). <u>Impact Factor JCR-2015: 1.304 (Q2)</u>
- Abdulhasan, Muntadher Qasim, Mustafa Ismael Salman, Chee Kyun Ng, Nor Kamariah Noordin, Shaiful Jahari Hashim, and Fazirulhisham Hashim. "Review of Channel Quality Indicator Estimation Schemes for Multi-User MIMO in 3GPP LTE/LTE-A Systems." *Published* in *KSII Transactions on Internet & Information Systems* 8, no. 6 (2014). <u>Impact Factor JCR-2015: 0.365</u>
- Abdulhasan, Muntadher Qasim, Mustafa Ismael Salman, Chee Kyun Ng, Nor Kamariah Noordin, Shaiful Jahari Hashim, and Fazirulhisham Hashim. "An Adaptive Threshold Feedback Compression Scheme Based on Channel Quality Indicator (CQI) in Long Term Evolution (LTE) System." *Published in* Wireless Personal Communications (2015): 1-27. <u>Impact Factor JCR-2015: 0.701</u>

#### **Published Proceedings and Conference Presentations**

- Salman, Mustafa Ismael, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sali. "Energy efficient transmission for LTE cellular system." In Computer and Communication Engineering (ICCCE), Malaysia, 2012 International Conference on, pp. 222-227. IEEE, 2012.
- 2. Salman, Mustafa Ismael, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sati. "CQI-MCS Mapping for Green LTE Downlink Transmission." *Proceedings of the Asia-Pacific Advanced Network* 36, *Korea* (2013): 74-82.
- 3. **Salman, Mustafa Ismael**, Chee Kyun Ng, and Nor Kamariah Noordin. "Energy-and Spectral-Efficient Wireless Cellular Networks." Proceedings of the Green Communications and Networking, GreenNets, colmar, France, 2011. http://greenets.org/2011/index.shtml.
- 4. **Salman, Mustafa Ismael**, Muntadher Q. Abdulhasan, Chee Kyun Ng, Nor Kamariah Noordin, Borhanuddin Mohd Ali, and Aduwati Sati. "Adaptive Threshold CQI Compression Scheme for LTE cellular Systems ." Proceedings of the Asia-Pacific Advanced Network 40, Malaysia (2015).
- 5. Abdulhasan, Muntadher Qasim, **Mustafa Ismael Salman**, Chee Kyun Ng, Nor Kamariah Noordin, Shaiful Jahari Hashim, and Fazirulhisham Bin Hashim. "Approximate Linear

Minimum Mean Square Error estimation based on Channel Quality Indicator feedback in LTE systems." In Communications (MICC), 2013 IEEE Malaysia International Conference on, pp. 446-451. IEEE, 2013.

- Abdulhasan, MQ., Salman, Mustafa Ismael., Ng, CK., Noordin, NK., Shaiful, JH., Fazirulhisham, BH., "A Threshold Feedback Compression Scheme of Channel Quality Indicator (CQI) in LTE Systems, ", 2013 IEEE Student Conference on Research & Development(SCOReD).
- Thian, L. L., Ali M. Al-Saegh, K. F. Ramli, N. S. Ibrahim, A. Sali, and Mustafa Ismael Salman. "Energy-driven scheduling for Digital Video Broadcasting-Satellite Second Generation (DVB-S2)." In Space Science and Communication (IconSpace), 2013 IEEE International Conference on, pp. 385-390. IEEE, 2013.

#### **Published Book Chapter**

1. Salman, Mustafa Ismael, Chee Kyun Ng, and Nor Kamariah Noordin. "Energy-and Spectral-Efficient Wireless Cellular Networks." In Green Communications and Networking, pp. 171-185. Springer Berlin Heidelberg, 2012.

#### **Honors and Awards**

- Outstanding PhD. Dissertation award by IEEE Malaysia Communications Society and Vehicular Technology Society Joint Chapter – 2015. The Certificate of Excellence is given, and will be available upon request.
- Best paper award, for the paper entitled "Adaptive Threshold CQI Compression Scheme for LTE cellular Systems", 40<sup>th</sup> Asia-Pacific Advanced Network Meeting, Malaysia -2015.
- Silver Medal Award for innovation of "A self-Configured Link Adaptation for Green LTE Downlink Transmission" at Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI-2014), on 30th September – 1st October 2014. University Putra Malaysia.
- Fellowship Delegate at the APAN36 meeting held at Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea, from 19th-23rd August 2013.
- Fellowship Delegate at the APAN40 meeting held at University of Malaya, Kuala Lumpur, Malaysia, from 10<sup>th</sup> -14<sup>th</sup> August 2015.
- Best Paper Award for the paper entitled "threshold feedback compression scheme of channel quality indicator (CQI) in LTE systems", of 2013 IEEE SCORED held at Palm Garden Hotel Putrajaya Malaysia, 16<sup>th</sup>-17<sup>th</sup> December 2013

# > Supervision of PhD and Master's degree theses, e.g.

- Time-Sensitive Networking: Real-time Communication for collaborative CPS and IoT / PhD -Ongoing
- A Software Defined Network of Video Surveillance System Based on Enhanced Routing Algorithms, 2017-2018 / Master - Graduated
- Resource Allocation for Internet of Things framework with Edge Computing by Using a Software Defined Network, 2018-2019 / Master - Graduated
- An Improved Virtual Data Center Based on Programming Protocol-Independent Packet Processor Technology, 2019-2020 / Master - Graduated
- A Content-aware Information Centric Network Based on a Virtualized-Programmable Forwarding Plane / Master On going

## > Supervision of many bachelor's degree final year projects, e.g.

- Client / Server based implementation of a university database center, 2003/2004.
- Design and implementation of a controlled web browser, 2003/2004.
- Java based messenger application, 2004/2005.
- Computer aided digital system design and implementation 2004/2005.
- Design and Implementation of up-link command communication protocol 2005/2006.
- Arduino Based Greenhouse Remote Monitoring and Controlling System, 2016-2017
- Object Tracking System Based On Color Recognition 2017-2018
- Real-Time Object Detection and Tracking System 2017-2018
- Smart Refrigerator for healthcare based on IoT Food Classification, 2018-2019
- VIRTUAL TELEPRESENCE USING RASPBERRY PI 3, 2019-2020

# **Professional Experience**

# Faculty member in University of Baghdad , College of Engineering (2003- present) with the following responsibilities

- Supervising masters and bachelor students
- Chairing and membership of several committees at the department, college and university levels, the most important of which are:
  - > Director of the E-Learning Unit College of Engineering 2018-2020
  - > Chairman of the Internet Follow-up Committee University of Baghdad 2018-2020
  - Chairman of the Quality assurance Committee Department of Computer Engineering 2017-2018
  - Chairman of the Quality Assurance Committee Department of Computer Engineering -2008-2010
  - Chairman of the examination committee Department of Computer Engineering 2003-2005
- Supervision of master's degree theses, e.g.
  - A Software Defined Network of Video Surveillance System Based on Enhanced Routing Algorithms, 2017-2018
  - Resource Allocation for Internet of Things framework with Edge Computing by Using a Software Defined Network, 2018-2019
  - An Improved Virtual Data Center Based on Programming Protocol-Independent Packet Processor Technology 2019-2020
  - A Content-aware information centric network based on a virtualized-programmable forwarding plane, 2020-2021

# Work Experience and Skills

- Network virtualization, creating VMs, containers and docker containers, using virtual box, proxmox.etc
- Web hosting management, including VPS installation, Control Panel (cPanel, vestacp ..etc)
- Website development including: HTML, Cascade Style Sheet (CSS), JavaScript, PHP & MySQL...etc
- Development of learning management system based on wordpress CMS.
- Achieving sales targets through strategic selling processes and sales plan.

#### Curriculum Vitae

- Following up new business opportunities & setting up meetings with clients.
- Working with sales managers and marketing teams on targeted communication programs, data analysis driven proposals and creating contact opportunities.
- Publishing more than 20 papers in journals and international conferences with relation to LTE cellular communications and Network virtualization.

# Training, workshops and Seminars records - (Certificates available upon request).

- Online Platform for Academic TEaching and Learning in Iraq and Iran (OPATEL) project, held at the College of Accounting and Management of the Higher Institute of ISPAB in Aveiro -Portugal for the period from February 24-28, 2020.
- E-Learning Professional Training Program held by The International Research & Exchanges Board (IREX) with the cooperation of ministry of higher education in Iraq from April 30 June 18, 2020.
- 5th Generation International Mobile Telecommunication Seminar, 27 May 2015, organized by Malaysian Technical Standards Forum Bhd (MTSFB).
- Optimization with MATLAB A Hands-On Workshop, November 14, 2013, organized by IEEE Signal Processing Society Malaysia. The Venue is at the college of engineering, University Tenaga Nasional, Putrajaya Campus.
- LTE Technology Short Course, 10<sup>th</sup>-14<sup>th</sup> December, 2012. Organized by Malaysian Communication and Multimedia Commission (MCMC), at wireless communication center, Faculty of electrical engineering, University Technology Malaysia.
- Open Standards & Internet Association, in Asia-Pacific Advanced Network 36th Meeting, 19th

   23<sup>rd</sup> August, 2013. Jointly organized by Korea Institute of Science and Technology Information (KISTI) and Korea Advanced Institute of Science and Technology (KAIST). It is held at KAIST, Daejeon, Korea.
- **Managing the Research Journey**, 17<sup>th</sup>-18<sup>th</sup> March 2012. Jointly organized by the peer support group graduate school, University Putra Malaysia and the students' learning center, University of Otago, New Zealand.
- Guides to Thesis Writing Seminar. 24<sup>th</sup> March, 2011. Organized by school of graduate studies, University Putra Malaysia.
- Avoiding Plagiarism Seminar. 25<sup>th</sup> January, 2011. Organized by school of graduate studies, University Putra Malaysia.

Curriculum Vitae

Mustafa I. Salman

- **Technical Writing with LaTex**, 7th December 2013. Organized by Department of Computer and Communication Systems Engineering, University Putra Malaysia.
- Satellite Receiving Technology. Training course in Worldwide Satellite Ltd. Located in London specialized in programming, repairing, and sales of satellite receivers from 20/05/2006 to 20/09/2006.

- MSCE Managing and Maintenance. Participating in the following courses "MCSE Courses": From 01/06/2005 to 20/09/2005
  - Managing and Maintaining a Microsoft Windows Server 2003 Environment
  - Planning, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure
  - Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure
  - Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure

#### Knowledge of languages

- Mother Tongue: Arabic
- Other Language: English (Read, Write, Speak, and Understand), Good. TOEFL Paper Best Test (540).