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CURRICULUM VITAE

Full name: Ahmad Salameh Salman Abusukhon

Computer Science/Science and Information Technology,
Al-Zaytoonah University of Jordan, Amman, Jordan.
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1- Personal Data

Date of Birth: 30-11-68
Nationality: Jordanian

2- Education

- Ph.D. (Computer Science) 2009, University of Sunderland, Sunderland, United Kingdom (UK)

- M.Sc. (Computer Science) 2001, The University of Jordan, Amman, Jordan

- B.Sc. (Computer Science) 1990, Mu'tah University, Al-Karak, Jordan.

3- Ph.D. Dissertation

An Investigation into improving the load balance and query throughput of distributed information retrieval system, The University of Sunderland, Sunderland, The United Kingdom (UK).

4- Employment

Academic Positions

- Associate Professor, Computer Science, Al-Zaytoonah University of Jordan, Amman, Jordan. Dec. 26, 2016 – 2022

- Assistant Professor, Computer Science, Al-Zaytoonah University of Jordan,

Amman Jordan. Dec. 28, 2009-2016

- Graduate Assistant, Computer Science, The Hashemite University, Zarqa March, 03, 2001 – March, 03, 2004.
- Associate Professor (as part time), Computer Science, The University of Jordan, Amman, Jordan. Sep. 15, 2018- Feb. 05, 2019.

Administrative Positions

- Team Leader for ASIC committee - the "B" standard: Management and Staff Resources- at Al-Zaytoonah University of Jordan. ASIC is standards for Accreditation for institutes such as universities, colleges and schools.

5- Research Interests

Dr. Ahmad Abusukhon interests include, but not limited to the following fields in the computer science domain:
- Internet of Things (IoT)
- Cryptography
- Computer Network Security
- Distributed Systems
- Parallel Computing
- Mobile Applications

6- Membership in Scientific Societies and Associations

- Member of the British Computer Society (BCS).

7- Honors and Awards

- Appears in the AD Scientific Index 2023 (Jordan Top 3000 Scientists)
https://www.adscientificindex.com/pdfs/toplists/jordan-top-scientists.pdf?v1660104457
-Reviewer certificate: Journal of Network and Computer Applications.
- Reviewer Certificate: Expert Systems (2021).
- Special Session Chair certificate: The Global Research Conference 2020 (GRaCe 2020)
  https://easychair.org/cfp/poster_download.cgi?cfp=GRaCe2020
 -Reviewer certificate: The 7th International Conference on Information Technology (ICIT 2015), 2017, 2019, 2021.
  [http://icit.zuj.edu.jo/icit13/index.html]
  [http://icit.zuj.edu.jo/icit15/Committees.aspx]

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[http://icit.zuj.edu.jo/icit17/Committees.aspx]
- Smart phones developer certificate granted by Pearson (Pearson Assured), The United Kingdom (UK).

8- Fellowships and Scholarships
- A scholarship for the award of Ph.D granted by Al-Zaytoonah University of Jordan in 2005.

9. Teaching Experience

- *Graduate Courses (Master Students)*
  - Advanced Wireless Computer Networks

- *Undergraduate Courses (Bach. Students)*

Work For	From	To	Position	Subjects
The Hashemite University	2000	2004	Lecturer	Database, Java and C++
AL-Zaytoonah University	2005	2007	Lecturer	■Information Security ■Visual Basic ■Computer skills
Al-Zaytoonah University	2009	Now	Assistant and Associated Prof.	■Network programming (using Java). ■Introduction to Computer Network. ■Advanced computer network. ■ Introduction to Java. ■ Java Advance ■E-commerce. ■Internet application programming using -Dreamwaver and PHP ■Discrete mathematics. ■Distributed Systems. ■ HTML. ■ Wireless Networks (Master Level)
The University of Jordan	9-2020	2-2020	Associate Prof.	■Network programming ■ Distributed systems

Dr. Ahmad Abusukhon is also able to teach Android courses (Basic, Intermediate and Advance level). Besides, he can teach Internet of Things using Arduino Uno,

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NodeMCU and various types of sensors which are connected with the Firebase database (the cloud), and lead groups of research (e.g. Master degree) in this domain. In addition, he has the ability to build various Internet of Things (IoT) applications for home and campus automation.

10. Supervision of Graduate Research (Master Students)

Dr. Ahmad has successfully supervised many Master students as described in the list below:

Student Name	Thesis Title	Year
Ali Bassam Al-thaher	An Efficient and Secure Key Exchange Protocol Based on Elliptic Curve and Security Models.	2018/2019
Thaer Mohammad Taha Abu Qattam	An Enhanced Lightweight Authenticated Elliptic Curve Key Exchange Protocol for Securing Internet of Things	2018/2019
Kholoud Ismail Odeh Saleh	A Secure and Efficient Authenticated Key Agreement Protocol Based on Elliptic Curve for Securing the Fog Computing Environment	June/2020

11. Projects Grants and Funds

Project-Name	Year	Grantor Organization	Grant Amount
1. An Intelligent Course Recommender System for Undergraduate Students Based on Learning Hidden Student Aptitudes.	2021	Al-Zaytoonah University of Jordan	5000 JD
2. Smart University –Power Conservation Using the Internet of Things (Microcontroller , Sensor, and Smart Programs for Data Analysis and Decisions Making)	2019	Al-Zaytoonah University of Jordan	14100 JD
3. Parallel Information Retrieval	2007	Al-Zaytoonah	11000 JD

	University of Jordan	

12. Patents

- One patent is under processing.

13. Membership of Committees

- Member of the Quality Assurance Committee at Al-Zaytoonah University of Jordan.
Standard 3. (Teaching processes)
- Member of ASIC quality assurance committee at Al-Zaytoonah University of Jordan.
Standard B (Governance, Management and Staff Resources).
- Head of examination and evaluation committee/computer science at Al-Zytoonah University.
- Head of Programming Committee at the Computer Science Dept.
- Member of the British Computer Society (BCS).

14. Professional and Scientific Meetings

Scientific Meetings Organized

Scientific Meetings Organized:
- Organizer of a workshop entitled as "New Techniques in Computer Networks" held in Al-Zaytoonah University of Jordan. Organized by Dr. Ahmad Abusukhon, 2015.
Participation in Scientific meetings:
- Workshop by "Microsoft", the University of Jordan, 2015.
- Meeting with IEEE organizers via zoom. The meeting is about how to successfully publish your paper with IEEE.

Participation in Scientific meetings

- Workshop by "Microsoft", the University of Jordan, 2015.
- - **Conference meeting are listed below in section 17 (publications).**

15. Participation in or organization of curricular and/or extra-curricular activities

- **Organizing Committee** (**Publication and Publicity Chair)**, The International Workshop for Software Defined Everything (SDE2020) in conjunction with the Seventh International Conference on Software Defined Systems (SDS-2020), https://emergingtechnet.org/SDE2020/, Paris, France,2020.

- **Local Managing Editor** of the International Journal of Advances in Soft Computing and its Applications (ISSN: 2074-8523), 2020-2021.

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-**Chair of special session** in the GRaCE 2020, 2020 Malaysia. The special session is entitled as "Special Session 5: Internet of Things Revolution: Challenges, Intelligent Applications and Advance Innovations "
https://easychair.org/cfp/poster_download.cgi?cfp=GRaCe2020

- **Reviewer:** I acted as a reviewer judging the promotion of a staff member working for the Public Authority for Applied Education and Training in Kuwait who applied for promotion from Assistant Prof. to Associate Prof.
- **Chair Session** in the World Congress on Engineering and Computer Science 2016- International Conference on Soft Computing and Applications 2016 (ICSCA), San Francisco , USA.
- **Reviewer** for the Journal of Network and Computer Applications.
- **Reviewer** in International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE)- 2015.
- **Reviewer** in the International conference on Information Technology ICIT 2013, ICIT 2015, ICIT 2017, ICIT 2019 and, ICIT 2023 at Al-Zaytoonah University of Jordan.
[http://icit.zuj.edu.jo/icit13/index.html] [http://icit.zuj.edu.jo/icit15/Committees.aspx] [http://icit.zuj.edu.jo/icit17/Committees.aspx].
- **Publicity Committee** ICIT 2021. [http://icit.zuj.edu.jo/icit2021/Committes.html]
- **Reviewer:** I acted as a reviewer judging the work of a staff member working in Khalifa University-Kuwait for promotion from Assistant Prof. to Associate Prof.
- **Guest reviewer** for the KSII Transactions on Internet and Information Systems.
-**Organizer of a Workshop** entitled "New Techniques in Computer Networks" held in Al-Zaytoonah University of Jordan, 2015.
- **A leader of a team** working on Quality Assurance system (ASIC system) -2022-2023.

16. Training courses and other skills

Course title	No. of hours	Place / country	Date
Android (3 levels) -Introduction -Intermediate -Advanced	98	Pioneers Academy/ Jordan Address : Q.Rania Street, Amman - Jordan +962 (6) 516 - 64 - 22 +962 (6) 516 - 64 - 33 +962 (6) 515 - 08 - 43 Email: info@pioneers-academy.com Mobile +962(79)707 - 87 - 77	7/3-24/10-2020
Smart phones developer using android (Certificate)	98	Pearson (Pearson Assured), The United	Certificate

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		Kingdom (UK)	
Machine Learning using Python	40 hours	Pioneers Academy	1/9-25/10-2020
Deep learning using Python	20 hours	Pioneers Academy	27/10-9/12-2020
Image processing (using MATLAB). Basic & advance level	52 hours	Pioneers Academy	29/9-16/3-2021
Arduino Uno (Internet of Things)	30 hours	Al-Baheth Center	18/06-4/7-2013
Cisco Certified Network Associate	About 50 hours	Knowledge Arabia. Jordan-Amman	

17. Publications

Papers in refereed journals

■ **A. Abusukhon** Intelligent Shoes for Detecting Blind Falls Using the Internet of Things. KSII Transactions on Internet & Information Systems. Vol. 17, No. 9, 2023.

■ **A. Abusukhon**, A. Al-Fuqaha, B. Hawashin, A Novel Technique for Detecting Underground Water Pipeline Leakage Using the Internet of Things. Journal of Universal Computer Science (JUCS). Vol. 29, No. 8. 2022.

■ **A. Abusukhon**, IOT Bracelets for Guiding Blind People in an Indoor Environment, in Journal of Communications Software and Systems, vol. 19, no. 2, pp. 114-125, April 2023, doi: 10.24138/jcomss-2022-0160.

■ B. Hawashin, **A. Abusukhon** An Efficient Course Recommender Using Deep Enriched Hidden Student Aptitudes. ICIC Express Letters, Part B: Applications, 2022.

■ **A. Abusukhon** (2021) Towards Achieving a Balance between the User Satisfaction and the Power Conservation in the Internet of Things, IEEE Internet of Things Journal, doi: 10.1109/JIOT.2021.3051764. impact factor 9.936. Published by IEEE. https://ieeexplore.ieee.org/document/9326414. [Science Citation Index].

■ **A. Abusukhon**, Z. Mohammad, A. Al-Thaher (2021) An authenticated, secure, and mutable multiple-session-keys protocol based on elliptic curve cryptography and text_to-image encryption algorithm. Concurrency and computation practice and experience. [Science Citation Index].

■ **Ahmad Abusukh**on, Bilal Hawashin and Mohammad Lafi (2021) An Efficient Algorithm for Reducing the Power Consumption in Offices Using the Internet of Things, International Journal of Advances in Soft Computing and its Applications (IJASCA). http://ijasca.zuj.edu.jo/Volumes.aspx

■ **A. Abusukhon**, N. Anwar, M. Mohammad, Z., Alghanam, B. (2019) A hybrid network security algorithm based on Diffie Hellman and Text-to-Image Encryption algorithm. Journal of Discrete Mathematical Sciences and Cryptography. 22(1) pp. 65-81. (SCOPUS). https://www.tandfonline.com/doi/abs/10.1080/09720529.2019.1569821

■ **A. Abusukhon**, B.Wawashin, B. (2015) A secure network communication protocol

based on text to barcode encryption algorithm. International Journal of Advanced Computer Science and Applications (IJACSA). (ISI indexing). https://thesai.org/Publications/ViewPaper?Volume=6&Issue=12&Code=IJACSA&SerialNo=9

■ **A. Abusukhon**, Talib, M., and Almimi, H. (2014) Distributed Text-to-Image Encryption Algorithm. International Journal of Computer Applications (IJCA), 106 (1). [available online at : https://www.semanticscholar.org/paper/Distributed-Text-to-Image-Encryption-Algorithm-Ahmad-Mohammad/0764b3bd89e820afc6007b048dac159d98ba5326]

■ **A. Abusukhon** (2013) Block Cipher Encryption for Text-to-Image Algorithm. International Journal of Computer Engineering and Technology (IJCET). 4(3) , 50-59. http://www.zuj.edu.jo/portal/ahmad-abu-alsokhon/wpcontent/uploads/sites/15/BLOCK-CIPHER-ENCRYPTION-FOR-TEXT-TO-IMAGE ALGORITHM.pdf

■ **A. Abusukhon**, Talib, M. and Nabulsi, M. (2012) Analyzing the Efficiency of Text-to-Image Encryption Algorithm. International Journal of Advanced Computer Science and Applications (IJACSA)(ISI indexing) , 3(11), 35 – 38. https://thesai.org/Publications/ViewPaper?Volume=3&Issue=11&Code=IJACSA&SerialNo=6

■ **A. Abusukhon**, Talib M., Issa, O. (2012) Secure Network Communication Based on Text to Image Encryption. International Journal of Cyber-Security and Digital Forensics (IJCSDF), 1(4). The Society of Digital Information and Wireless Communications (SDIWC) 2012. https://www.semanticscholar.org/paper/SECURE NETWORK-COMMUNICATION-BASED-ON-TEXT-TO-IMAGE-Abusukhon-Talib/1d122f280e0d390263971842cc54f1b044df8161

■ **A. Abusukhon**, M. Talib (2011) Analyzing the Load Balance of Term-based Partitioning, International Journal of Advanced Computer Science and Applications (IJACSA) , 2(1). pp 18-25. (ISI indexing). https://thesai.org/Publications/ViewPaper?Volume=2&Issue=1&Code=IJACSA&SerialNo=3

■ **A. Abusukhon**, M. Talib (2010) Improving Load Balance and Query Throughput of Distributed IR Systems. International Journal of Computing & ICT Research (IJCIR), 4(1), pp. 23-29, June 2010. https://www.semanticscholar.org/paper/Improving-Load-Balance-and-Query-Throughput-of-IR-Abusukhon/f530a4062e0a91fab755c1dbd481d190899d3b0d

■ **A. Abusukhon**, Oakes, M.P., Ayman M., A. (2009) Performance Analysis of Distributed IR Systems: Document-based, Term-based and Hybrid Partitioning. International Journal of Information Studies (IJIS), 1(1), P. 40-49. https://www.researchgate.net/publication/283796826_Performance_Analysis_of_Distributed_IR_Systems_Document-based_Term-based_and_Hybrid_Partitioning.

■ Zeyad Mohammad, **Ahmad Abusukhon** and Marzooq A. Al-Maitah (2017) A COMPARATIVE PERFORMANCE ANALYSIS OF ROUTE REDISTRIBUTION AMONG THREE DIFFERENT ROUTING PROTOCOLS BASED ON OPNET SIMULATION. International Journal of Computer Networks & Communications (IJCNC) Vol.9, No.2, March 2017. https://airccronline.com/ijcnc/V9N2/9217cnc04.pdf

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■ Zeyad Mohammad, **Ahmad Abusukhon**, Adnan A. Hnaif, Issa S., Al-Otom (2017) Performance Analysis of Route Redistribution among Diverse Dynamic Routing Protocols based on OPNET Simulation. (IJACSA). International Journal of Advanced Computer Science and Applications, vol. 8, no. 3, 2017. https://thesai.org/Downloads/Volume8No3/Paper_45-Performance_Analysis_of_Route_Redistribution_among_Diverse_Dynamic.pdf

■ Rasmi, M., **Abu sokhon**, A. Sh.Daoud, M., Al-Mimi, H. (2016) A Survey on Single Scalar Point Multiplication Algorithms for Elliptic Curves over Prime Fields. IOSR Journal of Computer Engineering (IOSR-JCE), 18(2) pp 31-47. http://www.zuj.edu.jo/portal/ahmad-abu-alsokhon/wp-content/uploads/sites/15/A Survey-on-Single-Scalar-Point-Multiplication-Algorithms-abstract.pdf

■ Nabulsi, M., **Abusukhon, A**. (2013) An investigation into the relationship between logical operations". International Journal of VLSI Design and Communication Systems (VLSICS). https://www.semanticscholar.org/paper/AN-INVESTIGATION-INTO-THE-RELATIONSHIPS-BETWEEN-Nabulsi-Abusukhon/6113d08f6881136f8b0f8c2ae11e3da62fadd4b1

■ M. Talib and **A. Abusukhon** (2008) Graphics Technology to Model the Problems of Calculus Using Analytical Geometry, Journal of System Analysis, Management and Information Technology (JSAMIT), Vol 5, Kharkiv, NTU "KhPI", pp 56-65, May 2008. http://repository.kpi.kharkov.ua/bitstream/KhPI-Press/32466/1/vestnik_KhPI_2008_5_Talib_Graphics.pdf.
There is also one paper under review.

Conference Presentations
■ **A. Abusukhon and Al ghannam, B**. The Role of the Internet of Things in Monitoring Air Pollution-A Survey. 2023 International Conference on Information Technology (ICIT). Pp. 583-585. 2023.

■ **A. Abusukhon**, F. Altamimi (2021) Water Preservation Using IoT: A proposed IoT System for Detecting Water Pipeline Leakage. The 2021 International Conference on Information Technology (ICIT). pp. 115-119, IEEE.

■ Z. Mohammad, V. Nyangaresi and **A. Abusukhon**, "On the Security of the Standardized MQV Protocol and Its Based Evolution Protocols," 2021 International Conference on Information Technology (ICIT), Amman, Jordan, 2021, pp. 320-325, doi: 10.1109/ICIT52682.2021.9491775.

■ Z. Mohammad, A. A. Alkhatib, M. Lafi, **A. Abusukhon**, D. Albashish and J. Atwan, "Cryptanalysis of a Tightly-Secure Authenticated Key Exchange without NAXOS Approach Based on Decision Linear Problem," 2021 International Conference on Information Technology (ICIT), Amman, Jordan, 2021, pp. 218-223, doi: 10.1109/ICIT52682.2021.9491743.

■ B. Hawashin, S. Alzubi, A. Mughaid, F. Fotouhi, **A. Abusukhon** (2020) An efficient cold start solution for recommender systems based on machine learning and user interests. The 2020 Seventh International Conference on Software Defined Systems (SDS). pp 220-225. IEEE.

■ **A. Abusukhon**, Al-Zu'bi, S. (2020). "New Direction of Cryptography: A Review on Text-to-Image Encryption Algorithms Based on RGB Color Value". 2020 Seventh International Conference on Software Defined Systems (SDS)SDS 2020: pp. 235-239, Paris – France. https://www.semanticscholar.org/paper/New-Direction-of-Cryptography%3A-A-Review-on-Based-on-Abusukhon-AlZu%E2%80%99bi/ad61651f4ea5d43ef455b82a3c452f821d4a4b51.

■ **A. Abusukhon**, Lafi, M. & Hawashin, B. (2020). "An intelligent IoT system for controlling office appliances - A trade-off between power conservation and the user satisfaction". GRaCe 2020conference, Malaysia. https://terengganu.uitm.edu.my/grace2020/images/SlideVC/GRaCe_2020_slidepresentation_94.pdf.

■ **A. Abusukhon**, Dasooqi, Z, and Talib, M. (2016) A Novel Network Security Algorithm Based on Encrypting Text into a White-page Image. Proceeding of The World Congress on Engineering and Computer Science 2016. International Conference on Internet and Multimedia Technologies 2016 (ICIMT), 19-21 Oct. 2016, USA, Berkeley – San Francisco. http://www.zuj.edu.jo/portal/ahmad-abu-alsokhon/wp-content/uploads/sites/15/A-Novel-Network-Security-Algorithm-Based-on-Encrypting-Text-into-a-White-Page-Image-Abstract1.pdf.

■ B. Hawashin, **A. Abusukhon**, and Ayman Mansour (2015) "An Efficient User Interest Extractor for Recommender Systems ". In the proceeding of : The World Congress on Engineering and Computer Science 2015 (WCECS 2015). http://www.iaeng.org/publication/WCECS2015/WCECS2015_pp791-795.pdf.

■ **A. Abusukhon**, Talib, M. (2012) A novel Network Security Algorithm Based on Private Key Encryption. The International Conference on Cyber Security, Cyber Warfare and Digital Forensic (CyberSec2012). https://ieeexplore.ieee.org/document/6246080.

■ **A. Abusukhon**, and Oakes, M.P. (2008a) An Investigation into Query Throughput and Load Balance Using Grid IR. In Proceedings of the 2nd BCS- IRSG Symposium on Future Directions in Information Access FDIA 2008. BCS London Office, UK, 22nd September 2008, pp. 38-44. eWic: UK. https://dl.acm.org/doi/10.5555/2227920.2227925.

■ **A. Abusukhon**, A., Oakes, M.P., Talib, M. and Abdalla, A. (2008b) Comparison Between Document-based, Term-based and Hybrid Partitioning. In: Snasel, V., Pokorny, J., Pichappan, P., El-Qawasmeh, E., and Ariwa, E. (Eds.). Proceedings of the First IEEE International Conference on the Application of Digital Information and Web Technologies, ICADIWT 2008. Ostrava, Czech Republic 4-6 August 2008, pp. 90-95. IEEE Xplore. https://www.semanticscholar.org/paper/Comparison-between-document-based%2C-term-based-and-Abusukhon-Oakes/48ae4ed24a6a31d894d4a59ff7548ca1263096ed.

■ **A. Abusukhon**, Talib, M. and Oakes, M.P. (2008c) An Investigation into Improving the Load Balance for Term-Based Partitioning. In: Kaschek, R., Kop, C., Steinberger, C., and Fliedl, G. (Eds.). Proceedings of UNISCON 2008, the 2nd International United Information Systems Conference. Klagenfurt, Austria 22-25 April 2008. LNBIP 5, vol.

5, pp. 380-392, Springer-Verlag Berlin Heidelberg 2008: Germany. https://link.springer.com/chapter/10.1007/978-3-540-78942-0_38.

■ **A. Abusukhon**, A., Talib, M. and Oakes, M.P. (2008d) Improving the Load Balance for Hybrid Partitioning Scheme by Directing Hybrid Queries. In: Burkhart, H. (Eds.). Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Networks as part of the 26th IASTED International Multi-Conference on APPLIED INFORMATICS. Innsbruck, Austria 12-14 February 2008, pp. 238-244. ACTA press: USA. https://www.zhangqiaokeyan.com/academic-conference-foreign_parallel-distributed-computing-networks_thesis/02051484466.html.

Books and Book Chapters
■ Abusukhon, A. (1996), "Oracle basic concepts". Majdalawi,Amman Jordan.
■ Abusukhon, A. (2012), "Wired and Wireless Networks in Java". (Owned by the publisher Dr. Ahmad Abusukhon).
■ LNBIP 5, vol. 5, pp. 380-392, Springer-Verlag Berlin Heidelberg 2008: Germany. https://link.springer.com/book/10.1007/978-3-540-78942-0.

Many thanks for reading Dr. Ahmad's C.V.