

CURRICULUM VITAE Ahmad Salameh Abusukhon

*Associate Professor at Department of Computer Science
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1. Personal Data

Nationality: Jordanian
Place of birth: Madaba

2. Education

- Ph.D. (Computer Science) 2009, The University of Sunderland, North London, United Kingdom (UK)
- M.Sc. (Computer Science) 2001, The University of Jordan, Jordan.
- B.Sc. (Computer Science) 1990, Mu'tah University, Jordan

3. Ph.D. Dissertation

"An investigation into improving the load balance and query throughput of distributed Information Retrieval (IR) systems", The University of Sunderland, UK.



4. Employment

4.1. Academic Positions

4.1.1. **The Hashemite University of Jordan , Jordan-Al-Zarqa**

- Lecture for 4 years (from 2000-2004)
- Master degree

4.1.2. **Al Zaytoonah University of Jordan** Amman, Jordan

- Working for the Computer Networks Dept.
- Assistant Professor
- From Oct 2009 – Oct 2016

Assistant Professor at the Computer Networks department

4.1.3. **Al Zaytoonah University of Jordan** Amman, Jordan

- Working for the Computer Science Dept.
- Associate Professor
- From Oct 2017 – Until now

Associate Professor at the Computer Science department

4.1.4. **The University of Jordan**

- **Lecturer** - Jordan - Amman
- Sep, 2019 – Feb, 2020 [Part Time as an Associate Prof.]

Part-Time Lecturer at Computer Science department.



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5. Research Interests

Dr. Ahmad Abusukhon is interest includes but not limited to the following fields in the computer science domain:

- Internet of Things
- Cryptography
- Computer Network Security
- Distributed Systems
- Parallel Computing
- Mobile Applications

6. Teaching Experience

6.1. Undergraduate Courses

Work For	From	To	Position	Subjects
The Hashemite University	2000	2004	Lecturer	Database, Java and C++
AL-Zaytoonah University	2005	2007	Lecturer	<ul style="list-style-type: none"> ■ Information Security ■ Visual Basic ■ Computer skills
Al-Zaytoonah University	2009	Now	Assistant and Associated Prof.	<ul style="list-style-type: none"> ■ 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.	<ul style="list-style-type: none"> ■ Network programming ■ Distributed systems



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6.2. Graduate Courses

6.2.1. Advanced Wireless Computer Networks

7. Training courses

Course title	Period	Training Centre	Country
CCNA (Cisco Certified Network Associate)	2 months 45 hours	Knowledge Arabia	Jordan
Introduction to Oracle RDBMS7	24 hours	C.E.B	Jordan
Advanced Application Building (SQL*FORMS)	24 hours	C.E.B	Jordan
Analyst/Programming Component" of the Education Information Management Systems	13 Feb. till 7May 1995	EUROPEAN COMMUNITY (SPAN Consultants)	Netherland
Arduino Microcontroller	50 hours	eBaheth	Jordan
Mobile Programming (Android)	90 hours	Pioneer Academy	Jordan
Machine Learning	40 hours	Pioneer Academy	Jordan
Deep Learning	20 hours	Pioneer Academy	Jordan
Imaging Processing (Matlab)	52 hours	Pioneer Academy	Jordan

8. Academic activities

- **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.
- **Local Managing Editor** of the International Journal of Advances in Soft Computing and its Applications (ISSN: 2074-8523), 2021.
- **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), <http://emergingtechnet.org/SDE2020/>, Paris, France, 2020.
- **Chair Session** in the World Congress on Engineering and Computer Science 2016- International Conference on Soft Computing and Applications 2016 (ICSCA), San Francisco , USA.
- **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 “



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- **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 2021 at Al-Zaytoonah University of Jordan.
- **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.

9. Publications

9.1. *Journal Papers:*

- **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 Abusukhon, 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>
- **Abusukhon, A, Naveed 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).
- **Abusukhon A., Hawasheen, B.** (2015) "Text to Barcode Encryption Algorithm" Submitted to : *International Journal of Advanced Computer Science and Applications* (IJACSA). (**ISI indexing**).



- **Abusukhon, A.**, Talib, M., and Almimi, H. (2014) “Distributed Text-to-Image Encryption Algorithm”. *International Journal of Computer Applications (IJCA)*, 106 (1). [available online at : <http://research.ijcaonline.org/volume106/number1/pxc3899518.pdf>]
- **Abusukhon, A.** (2013) “Block Cipher Encryption for Text-to-Image Algorithm”. *International Journal of Computer Engineering and Technology (IJCET)*. 4(3) , 50-59.
- **Abusukhon, A.**, 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.
- **Abusukhon, A.**, 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.
- **Abusukhon, A.**, 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)**.
- **Abusukhon, A.**, 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.
- **Abusukhon, A.**, 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.
- 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.
- 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.
- 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.



■ Nabulsi, M., **Abusukhon, A.** (2013) “An Investigation into the Logical Operations”. the International Journal of VLSI Design and Communication Systems (VLSICS).

■ 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.

9.2. Conferences

■ **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.

■ 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.

■ **Abusukhon, A., 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.**

■ **Abusukhon, A., 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.

■ **Abusukhon, A., 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.

■ Bilal Hawashin, **Ahmad 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).

■ **Abusukhon, A., 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).

■ **Abusukhon, A.** 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*



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Future Directions in Information Access FDIA 2008. BCS London Office, UK, 22nd September 2008, pp. 38-44. eWic: UK.

■ **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.

■ **Abusukhon, A.**, 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.

■ **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.

10. Books

- 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).

11. Projects carried out and funded by at Al-Zaytoonah Private University of Jordan

1. Distributed information retrieval System- new search engine (MDIR): "Moderate Distributed Information System" carried out at Al-zaytoonah University of Jordan in 2009 by Dr. Ahmad Abusukhon and Dr. Ayman Abdullah. Supported by Al-zaytoonah University of Jordan (30,000 JD).
2. Power Conservation using Internet of Things, Dr. Ahmad Abusukhon (main researcher), Dr. Mohammad Lafi (secondary researcher) and Bilal Hawashine (secondary researcher). The cost of the above project is (14,100 JD).



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3. An Intelligent Course Recommender System for Undergraduate Students Based on Learning Hidden Student Aptitudes. (2021) , The cost of the above project is (5000 JD).

12. Teaching Skills

- 1- Master Level- subjects : Wireless Networks for Master students.
2. Bach. Level (see 3. Job and experiences).
3. I have managed and supervised dozens of student's graduation projects.
These projects include:
- 4.Using microcontrollers and sensors (e.g. Home automation, controlling streets light, etc).
- 5.Developing encryption algorithms.
- 6.Using Cisco Packet Tracer as a vehicle to design different network projects.

13. Supervision of Graduate Research (Master Thesis)

1. “An efficient and secure key exchange protocol based on Elliptic Curve and security models (2019).
2. “An enhanced lightweight authenticated Elliptic Curve key exchange protocol for securing internet of things (2019).
3. A Secure and Efficient Authenticated Key Agreement Protocol Based on Elliptic Curve for Securing the Fog Computing Environment (2020)

Many thanks for reading my C.V.
Dr. Ahmad Abusukhon,