

# Yousef Kilani

## Personal Details:

**Name** : Yousef Moh'd Ahmad kilani.  
**Nationality** : Jordanian.  
**Date Of Birth** : 22th March. 1972.  
**Place of Birth** : Judiata- Irbid-Jordan.  
**Religion** : Islam  
**Language** : Arabic, English, Bahasa Malaysia (Basic level).

## Address:

Dr. Yousef Kilani  
Associate Prof.  
Department of Computer Information Systems  
Faculty of Prince Al-Hussein Bin Abdullah II for Information Technology  
The Hashemite University  
Jordan  
Email: ymkilani@hu.edu.jo,  
y\_kilani@yahoo.com  
Phone: +962-0798401987

## Research Interest:

My research interests include: AI, local search algorithms, web intelligence (in particular, the recommender systems), and computer network.

## Education History:

- **Ph.D. in Computer Science** (Universiti Kebangsaan Malaysia, 2004-2007) (Faculty of Information technology, Universiti Kebangsaan Malaysia). I have done my Ph.D. degree by research in *the field of Artificial intelligence-local search algorithms*. The title of my Ph.D. thesis is:  
“Speeding up local search by using the island confinement method”
- **MSc. in Computer Science** (University of Science Malaysia 1995- 1997)), Faculty of Computer Science, University of Science Malaysia: I have done my master degree by research in the field of *Scheduling and genetic algorithms*. The title of my Master thesis is:  
“Application of Genetic Algorithms in Optimization the Distribution of Examinations in an Examination Scheduling Problem”
- **University Education** (1990-1994): Bachelor of Science Majoring in Computer Science from Computer Science Department, Yarmouk University- Jordan (CGPA: 72.3).

- Pre-University: Judiata Secondary School - Jordan (Sep. 1989 - Aug.1990) . Avg: 84.3/100

## **Publications:**

1. Alsarhan, A., **Kilani, Y.**, Al-Dubai, A.Y., Zomaya, A.Y., and Hussain, A. Novel Fuzzy and Game Theory Based Clustering and Decision Making for VANETs, IEEE Transaction in Vehicular Technology, PP: 1568-1581, Vo. 69, No. 2, 2020.
2. **Kilani, Y.** Alhijawi, B., Alsarhan, A. Using Artificial intelligence Techniques in Collaborative Filtering Recommender Systems: Survey. International Journal of advanced intelligence paradigms, Vol. 11, No. 3/4, pp. 378-396, 2018.
3. **Kilani, Y.** Otoom, A.F, Alsarhan, A. and Almaayah, M. A genetic algorithms-based hybrid recommender system of matrix factorization and neighborhood-based techniques. Journal of Computational Science, pp. 78-93, Vol 28, 2018.
4. Alsarhan, A., Quttoum, A., **Kilani, Y.** Optimizing spectrum sharing in wireless Mesh Network Using Cognitive Technology. Wireless Personal Communications, Vol. 96, No. 2, pp: 1887-1905, 2017.
5. Bsoul, M., **Kilani, Y.**, Hammad, M., Abdallah, E.E., Alsarhan, A.: An Index-Based Approach for Wireless Sensor Networks. Wireless Personal Communications Vol. 82, No. 4, pp. 2185-2197 (2015).
6. Alsarhan, Y., Al-Sarayreh, K. A. Al-Ghuwairi, A., **Kilani, Y.:** Resource trading in cloud environments for profit maximisation using an auction model. International Journal of advanced intelligence paradigms Vol. 6, No. 3, pp. 176-190, 2014.
7. Otoom, A.F., Abdallah, E.E., **Kilani, Y.**, Kefaye, A. and Ashour, M. Effective diagnosis and monitoring of heart disease, *International Journal of Software Engineering and its Applications.*, pp. 143-156, Vol. 9, No. 1, 2015.
8. Alhijawi, B. and **Kilani, Y.** The Recommender System: A Survey. International Journal of advanced intelligence paradigms, Forthcoming.
9. Alhijawi, B. and **Kilani, Y.** and Alsarhan, Y., Improving Recommendation quality and performance of Genetic-Based Recommender System. International Journal of advanced intelligence paradigms, Vol. 15, No. 1, 2019.
10. **Kilani, Y.**, Alsarhan, A. Bsoul, M., and El-Salhi, S. Local Search-Based Recommender System for Computing the Similarity Matrix. International Journal of Intelligent Systems Technologies and Applications, PP: 391-404, Vol. 18, No. 4, 2019.

11. **Kilani, Y.**, Bsoul, M., Obeidat, I. and Al-Rababaa, M. (2012) 'IslandSAT', *Int. J. Advanced Intelligence Paradigms*, Vol. 4, Nos. 3/4, pp.278–298.
12. Alsarhan, A., Agarwal, A., Obeidat, I., Bsoul, M., Al-Khasawneh, A. **Kilani, Y.** Optimal Spectrum Utilization in Cognitive Network Using Combined Spectrum Sharing Approach: Overlay, Underlay and Trading. *International Journal of Business Information Systems*, pp: 423-454, Vol 12, No. 4, 2013.  
<http://www.inderscience.com/info/inarticletoc.php?jcode=ijbis&year=2013&vol=12&issue=4>
13. Obeidat, I., Al-Khasawneh, A., Bsoul, M., **Kilani, Y.** Toward power consumption in wireless sensor networks routing technique. *International Journal of Networking and Virtual Organisations*, pp: 238-250, Vol. 12, No. 3, 2013.
14. Bsoul, M., Khasawneh, A., **Kilani, Y.** , Obeidat, I. Enhanced fast spread replication strategy for data grid. *Journal of Network and Computer Applications*, Volume 34 Issue 2, pp. 575-580 , March, 2011 Academic Press Ltd. London, UK. <http://www.journalogy.net/Publication/39333277/enhanced-fast-spread-replication-strategy-for-data-grid>
15. Bsoul, M., Khasawneh, A., **Kilani, Y.** , Obeidat, I. A Threshold-based Dynamic Data Replication Strategy. *The Journal of Supercomputing* (12 August 2010), vol. 53, no. 1, pp. 1-10.  
<http://www.journalogy.net/Publication/15227213/a-threshold-based-dynamic-data-replication-strategy>
16. **Kilani, Y.**. Improving GASAT by Replacing Tabu Search by DLM and Enhancing the Best Members. *Journal of Artificial Intelligence Review*. Elsevier Publisher, Volume 33, Issue 1-2 (February 2010), pages 41 - 59 <http://portal.acm.org/citation.cfm?id=1713728>
17. **Kilani, Y.**. Comparing the Performance of the Genetic and Local Search Algorithms for Solving the Satisfiability Problems, *Journal of Applied Soft Computing* Volume 10, Issue 1, January, 2010, Elsevier Publisher. Pages 198-207.
18. Fang, H., **Kilani, Y.**, Lee, J.H.M. and Stuckey, P.J. The island confinement method for reducing search space in local search methods. **Journal of Heuristics**, Kluwer Academic Publishers, Volume 13, Number 6, 2007.  
<http://www.springerlink.com/content/60265m5370tr8193/fulltext.pdf>
19. **Kilani, Y.** Speeding up the recommender systems by excluding the low rated items. ADVCOMP 2018 : The Twelfth International Conference on Advanced Engineering Computing and Applications in Sciences, Athens, Greece, pp. 24-27, 2018.

20. Alhijawi, B. and **Kilani, Y.** Using genetic algorithms for measuring the similarity values between users in collaborative filtering recommender systems. 15th IEEE/ACIS International Conference on Computer and Information Science, ICIS 2016, Okayama, Japan, June 26-29, 2016.
21. Alsarhan, A., Al-Dubai, A., **Kilani, Y.** , Alkhalidy, M., A new security approach for the spectrum access in vehicular Ad Hoc networks. The Thirteenth International Conference on Digital Society and eGovernments, Athens, Greece, 2019.
22. Obeidat, I., Bsoul, M. Khasawneh A. **Kilani, Y.** "Enhancing the Connectedness in ad-hoc Mesh Networks Using the Terranet Technology" ICECECE 2012 : International Conference on Electrical, Computer, Electronics and Communication Engineering, Venice, Italy 2012
23. **Kilani, Y.**, Bsoul, M., Alsarhan, A., and obeidat, I. Improving PAWS by the island Confinement Method. 11th International Conference on Artificial Intelligence and Soft Computing, Zakopane, Poland, April 29-May, April 29 - May 3, 2012.
24. **Kilani, Y.** Enhancing GASAT by Using the Discrete Lagrangian-Multiplier Algorithm. International conference on Artificial Intelligence and Applications, Innsbruck, Austria, February 17 – 18, 2009.
25. **(My Ph.D. thesis published by LAP LAMBERT Academic Publishing AG & Co. KG).** Kilani, Y., 2007. **Speeding up local search By using the island confinement method.** Ph.D. thesis, Department of Computer Science, University of Kebangsaan Malaysia, Malaysia, published by **LAP LAMBERT Academic Publishing AG & Co. KG**, Theodor-Heuss-Ring 26, 50668 Kln, Germany. It is available from [www.amazon.com](http://www.amazon.com).
26. **Kilani, Y.**, Alsarhan, A., Bsoul, M. and Otoom, A.F. Local Search Algorithms for Solving the Combinatorial Optimization and Constraint **Satisfaction Problems. Book chapter in Soft Computing and Applications in the series of Advances in Intelligent Systems and Computing**, Vol 356, 2015, pp. 199-211. [http://link.springer.com/chapter/10.1007%2F978-3-319-18296-4\\_16](http://link.springer.com/chapter/10.1007%2F978-3-319-18296-4_16)

**External and Internal Examiner (Master):**

<b>External/ internal examiner</b>	<b>University Name</b>	<b>Student Name</b>	<b>Thesis title</b>	<b>Year</b>
External Examiner	AL-Albayt University	Ra'ed Thaib Awwad Al	Irregular strategy for sub-mesh Allocation	2016

		Harafsheh	strategy in 2D Mesh-connected Multicomputers	
External Examiner	AL-Albayt University	Kawther Zboon	Flame clustering and cuckoo search for build new intruder detection system	2017
Internal Examiner	Hashemite University	Jehad Abu Dawood	Priority - Based Secondary Users over Cognitive Radio Networks	2017
Internal Examiner	Hashemite University	Omar Khawaldeh	An economic framework for optimal admission to maximize profit in wireless network	2018
Internal Examiner	Hashemite University	Mohammad Numan.	A Novel E-learning cloud provider to increase profit using bidding in learning courses	2018

#### **Master Supervision:**

- I supervise the following master student who graduated in 2016: Bushra Hijawi. Her thesis title is “The use of the genetic algorithms in the recommender systems”.

#### **Reviewer:**

-I reviewed the work of a master student at AL-Albayt University:

اثر استخدام برنامج محوسب في تحصيل طلبة الصف السابع الاساسي. غسان هادي خورشيد. قسم العلوم التربويه في كلية العلوم التربويه في جامعة آل البيت

#### **A BET accreditation:**

I am the head of the computer science department since the first semester 2018/2019. We are in the process of ABET accreditation for our program “Bachelor in Computer Information systems”.

#### **Research Fund:**

Improving Recommender Systems Using Artificial Intelligence Techniques, 3700JD, 2015-2016.

#### **Activities:**

- I have attended the workshop in Brussel titled “European Association for quality assurance in higher education (ENQA)” in January 2019 which was fully supported by the European Association for quality assurance.
- I have given a seminar in our faculty about ENQA in January 2019.
- I attended the conference “Towards National Qualifications framework for Jordan” which held in March 2019 at Princess Sumaya University for Technology.
- I attended “The international conference on advanced engineering computing and applications in science” and presented my paper titled “speeding up the recommender systems by excluding the low rated items” in December in Greece, 2018.
- I attended the deans’ meeting about the qualification exam for Bachelor students in Jordan which held in Accreditation and Quality Assurance Commission for Higher Education Institutions in Amman in February 2019.
- Reviewer in IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT).
- Reviewer in the 2nd Workshop on Computer & Information Sciences (WCIS'2015) : Arabic Natural Language Processing: Models, Systems and Application, University of Tabuk, Kingdom of Saudi Arabia: <http://www.shquier.com/wcis/>.
- Reviewer in the IEEE computational intelligence magazine.
- Reviewer in the Journal of Knowledge-Based Systems.
- Reviewer in journal of advanced artificial intelligence paradigms.
- Reviewer in the International Arab Journal of Information Technology.
- A member of the organizing committee of the 2012 IEEE International Conference on Computers, Information and Telecommunication Systems, CITS 2012 – Hashemite University and Philadelphia University, Jordan, May 14 2012.

**Teaching:** I taught the courses: Special topics for master students, Web Programming, Visual basic, Discrete Maths, C language, Computation theory, C++, distributed computing, Introduction to programming, Data Structure, Artificial intelligence and Logic programming, C++, LINUX.

### **Working Experience:**

Lecturer (Hashemite University since second semester -10<sup>th</sup> February 2008). I have been the head of the department of computer information systems from 2012-2014 and 2017-on.

Lecturer (Multimedia University, Malaysia. Since 2006 –2007): I taught the courses: Artificial intelligence and Logic programming).

Lecturer (Al-Albays University – Jordan 2002-2004): I have taught the following courses: Computation theory, software engineering, computing I & Computing 2, Linux, Data structure.

Tutor (Chinese University of Hong Kong – Hong Kong 2000-2002): I tutored the courses: Discrete math, Data structure, Algorithms, Programming with Constraints, Topics in Constraint Processing.

Lecturer (University of Science Malaysia (UNIMAS)-Malaysia, 5th may 1997-26th Sep. 1999): I have taught the following courses in UNIMAS: C++, LINUX, Data Structure, Distributed Systems, C language, Discrete Maths and Computation theory.

Research officer: (1st may 96-4th May 97): I worked at University of Science Malaysia. The research title was: " The Construction of the machine translation system based on English/Malay Bilingual knowledge Bank". The project is being done at the Computer Aided Translation Unit, School of Computer Science, University of Science Malaysia. The project had been done under the supervision of Dr. Tang Enyakong.