CURRICULUM VITAE

- Name: Shahab Wahhab Kareem
- Date of Birth:1-1- 1977
- Gender: Male
- Marital status: Married
- Telephone: Mob: 00964 7504413108—00964 7719481338
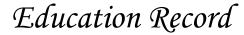- Scientific Ranking: Assistant Professor in Computer Engineering
- E-Mail: shahabwkareem@gmail.com, shahabwk@yahoo.com
- Languages:
  English: written, listening, reading, and speaking
  Kurdish: written, listening, reading, and speaking (native language)
  Arabic: written, listening and reading, and speaking (native language)
  Turkish: written, listening and reading, and speaking (beginner)

Education Record

October 2014- January 2020

Yasar University Izmir – Faculty of Engineering - <u>Computer Engineering department Ph.D.</u>
· Modules: Advanced Algorithm Design, Parallel Computer Architectures, Parallel Programming, Computational Algebraic Number Theory, Theory of Computation, Seminar, Computer Forensics and Machine Learning.

Ph.D. Thesis: "Novel Swarm Intelligence Algorithms for Structure Learning of Bayesian Networks and A Comparative Evaluation".
Bayesian networks are useful analytical models for designing the structure of knowledge in machine learning which can represent probabilistic dependency relationships among the variables.
In this thesis, we proposed five algorithms for the search part and used BDeu as a score function. We also proposed a sixth method which is also a nature-inspired one. The first proposed algorithm used Pigeon Inspired Optimization as a search method and the above-mentioned score function.

Nov. 2006 – May 2009
Salahadeen University, Hawler – Iraq

Master Taught programs in Software Engineering
MSc Thesis: Hybrid Public Key Encryption algorithms in E-commerce.
dealing with Web Security and Security of Electronic-Commerce by proposed three public keys. (using java programming to implement security algorithms and using ASP and MS access to implement E-commerce)
Modules: Distributed database, control Simulink, web technology, advanced networking, data compression, algorithms, data warehousing, and data mining,

advance operating system, advance software engineering, real-time system, neural network, and IP networking.

Nov. 1996 – May 2001

BSc in Control and the Computer Engineering University of Technology.

Modules: Project management, Circuit theory, digital communication, Digital Logic Design, Hardware Description Languages, Telecommunications Systems, engineering mathematics, control system, analog electronic, digital system architecture and internet computing, computer control, advanced control system, design microcomputer, instrument and measurement, computer architecture and robotic.

Experience Record

➢ **November 2016-2017-2018, 2020-2021, 2021-2022, 2022-2023.**

LEBANESE FRENCH UNIVERSITY – ERBIL /IT Department, as a part-time lecturer **in the capacity of Lecturer**, Duties and performing the following:

- Teaching at the Undergraduate Information System Engineering course such as BIGDATA (using HADOOP), Computer Forensics (using Wireshark, autopsy), and Development course material.
- Exploiting the many opportunities for the facility to provide basic additional one-to-one support to students and to work with the associate deans and program coordinators for undergraduate and also provide assistance to the timetable officer during peak periods.
- Development of syllabus and learning materials as appropriate, in accordance with college quality enhancement policies and processes.

➢ **October 2017-2018**

BAYAN UNIVERSITY – ERBIL /Computer Science Department as a part-time lecturer, **in the capacity of Lecturer**, Duties and performing the following:

- Teaching the Undergraduate Computer Science course such as Microprocessor, Structure Programming (using C++)
- Development course material.
- Development of syllabus and learning materials as appropriate, in accordance with college quality enhancement policies and processes.

➢ **October 2011-2012-2013 – 2014,2018- 2019-2020-2021**

Erbil Technical College – Information System Engineering Department, in the capacity of Lecturer, Duties and performing the following:

- Teaching at the Undergraduate Intelligent Information Retrieval, Information System Engineering course such as Spatial database (using Oracle), object-oriented programming (using java), Information System analysis and design, Information Retrieval, and supervising.
- final year project (design network using VLAN, design mobile application using C#).
- Development course material.
- Exploiting the many opportunities for the facility to provide basic additional one-to-one support to students and to work with the associate deans and program coordinators for undergraduate and also provide assistance to the timetable officer during peak periods.

- Development of syllabus and learning materials as appropriate, in accordance with college quality enhancement policies and processes.
- Contribute to the improvement of the student experience by ensuring supported and guidance is provided to students and that an appropriate personal academic tutor.

Erbil Technical Institute and Bardarrash technical institute – Computer science Department, in the capacity of Lecturer, Duties and performing the following:
- Operating system concept
- Information security (using C language)

➢ **October 2009 – October 2013** (one day per week) as a part-time
Computer Science Institute –Sulaimanyia/Iraq, in the capacity of Lecturer in Network Department, Duties and performing the following:
- Teaching at the Undergraduate Web programming, network programming using java, network application in Ubuntu, and mobile technology.
- Supervise final year project.
- Development course material.
- Exploiting the many opportunities for the facility to provide basic additional one-to-one support to students and to work with the associate deans and program coordinators for undergraduate and also provide assistance to the timetable officer during peak periods.
- Participate in Examination Committee and Head of IT Centre Committee.

Training and Volunteer

➢ English Course (arranged by Mohe -sul- 18 days) Basic certificate
➢ TOT Microsoft (arranged by alamal - 10days) Basic certificate
➢ TOT GIZ (FTE suly- 11days) Basic awareness
➢ IELST certificate (score 5)

IT Skills

- Knowledgeable in many programming languages –C#, Python, matlab, Java (Blue & J Creator LE), J#.
- Knowledgeable in many programming languages – ASP, PHP, VB, C#, C++, python.
- Knowledgeable in many Application and Database management systems – Oracle, SQL Server, MS Access, Visual FoxPro, Mat lab.
- Competent in using UNIX, Windows, and Linux.
- Excellent in MS Office including Word, Excel, Access, and PowerPoint.
- Excellent skills in searching the internet for information and using email.
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Interpersonal Skills

Problem-solving: Able to identify potential problems and risks; simplify complex problems by breaking them down. The approach that I follow is simple, identify – Approach positively – View the situation as an opportunity – develop the methodology.

Communication: Strong excellent communication skills have helped to secure high marks on project assignments. Excellent verbal communication, and dealing sensitively with diverse cultures led me to achieve high customer service targets at the refugee council and I was promoted to assistant manager in a short time.

Numeracy & Technical: Always maintained good marks in mathematics and good understanding to solve numerical problems and familiarity with the charter, table, and graphs. Highly competent in understanding engineering techniques and very logical in demonstrating results.

Organizational skills: Coping with studies, part-time work, hobbies, and social gatherings have led to the development of my organizational skills. This helps to derive maximum output in the minimum time and priorities my tasks effectively. I am a member of the management committee for the Kurdish Association in Birmingham which provides support and advocacy to service users.

Ability to handle pressure: Ability to work with a calm mind and produce quality results under pressure. Successfully achieved all project assignments and work-related submitted by the deadline at university.

Interests

In my spare time, I enjoy playing Chess because it uses logical techniques and analysis. Reading books is a necessity for open-mindedness and towards the better treatment of people and the environment. I like to meet different people to learn from their ideas and attitudes; I am a member of the management committee for the student activities at British Royal University which provides support and advocacy for the students.

Field of Administration

The assistance of Dean IN ChamChamal Technical Institute (8/2/2004 --- 1/11/2006)

Head of Administration department ChamChamal Technical Institute(10/3/2009- 30/10/2009)

· Head of Computer department ChamChamal Technical Institute(30/10/2009- 1/6/2010).

Supervisor of MSc and PhD researcher

1- MSc title (A Deep Learning and Neural Network Approach to Predict Wind Speed and a Comparative Evaluation), 2020-2021.
2- MSc title (Comparative Evaluation for Detection of Normal, Arrhythmia, and Congestive Heart Failure in Electrocardiogram using Several Machine Learning Algorithms), 2021-2022.
3- MSc title (Comparative Evaluation of Deep Learning for Humidity Detection in Erbil city), 2021-2023.
4- MSc title (A Deep Learning Approach and Recurrent Neural network towards Clickbait Detection), 2021-2023
5- PhD title (Bayesian Network Structure learning in Big Data), 2021- present.

Field of Research

1. **Ph.D. Thesis: Novel Swarm Intelligence Algorithms for Structure Learning of Bayesian Networks and A Comparative Evaluation,** *Yasar University Izmir – Faculty of Engineering -computer Engineering department, 2020.*
2. In MSc my research is **hybrid public key cryptography in E-commerce**.

Published papers.

1. *An Ensemble Transfer Learning Model for Detecting Stego Images,* Applied Sciences 13 (12), 7021 (2023)

2. *A Comparative Evaluation of Bayesian Networks Structure Learning Using Falcon Optimization Algorithm,* International Journal of Interactive Multimedia & Artificial Intelligence, 2023

3. *Information security for big data using the NTRUEncrypt method,* Measurement: Sensors 27, 100738, (2023)

4. *Deep learning and neural network-based wind speed prediction model,* International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, (2022)

5. *A comparison of automated classification techniques for image processing in video internet of things,* Computers and Electrical Engineering, 2022.

6. *Optimization of Electric Automation Control Model Based on Artificial Intelligence Algorithm,* Wireless Communications and Mobile Computing, Hindawi, 2022.

7. *Cancer Incidence in the Kurdistan Region of Iraq: Results of a Seven-Year Cancer Registration in Erbil and Duhok Governorates,* Asian Pacific Journal of Cancer Prevention (APJCP), Volume 23, Issue 2, February 2022.

8. *Bayesian Network Structure Discovery Using Antlion Optimization Algorithm.* Int. J. Systematic Innovation, 7(1), 46-65 (2022).

9. *Comparative Evaluation of Machine Learning Algorithms in Breast Cancer,* Qalaai Zanist Journal, 2022

10. *Falcon Optimization Algorithm For Bayesian Network Structure Learning,* Computer Science • 22(4) 2021.

11. *An Evaluation ALgorithms for Classifying Leukocytes Images,* International Engineering Conference (IEC) (IEEE), 2021.

12. *Predicting temperature of Erbil city applying deep learning and neural network,* Indonesian Journal of Electrical Engineering and Computer Science, 2021.

13. *Search engine optimization: a review,* Applied Computer Science,2021.

14. *A comparative Evaluation of Swarm Intelligence Algorithm Optimization: A Review,* Journal of Electronics, Electromedical Engineering, and Medical Informatics, 2021.

15. *An approach for enhancing data confidentiality in hadoop,* Indonesian Journal of Electrical Engineering and Computer Science, Vol. 20, No. 3, December 2020, pp. 1547~1555.

16. *Enhancing Approach for Information Security in Hadoop, Polytechnic Journal. 2020. 10(1): 81-87*

17. **Medical Image Classification Using Different Machine Learning Algorithms,** AL-Rafidain Journal of Computer Sciences and Mathematics, Volume 14, Issue 1, Pages 135-147, May 2020.

18. *Structure Learning of Bayesian Networks Using Elephant Swarm Water Search Algorithm,* International Journal of Swarm Intelligence Research, Volume 11 • Issue 2 • April- June-2020 • ISSN: 1947-9263 • eISSN: 1947-9271.

19. **Chapter 8:** Evaluation of Bayesian Network Structure Learning Using Elephant Swarm Water Search Algorithm, **Handbook of Research on Advancements of Swarm Intelligence Algorithms for Solving Real-World Problems,** Part of the Advances in Computational Intelligence and Robotics Book Series, ISBN: 9781799832225, Pages: 300, Copyright: 2020, Release Date: April, 2020.

20. **Secure Cloud Approach Based on Okamoto-Uchiyama Cryptosystem,** Journal of Applied Computer Science & Mathematics, Issue 1/2020, vol.14, No. 29, Suceava

21. *Bayesian Network Structure Learning Based On Pigeon Inspired Optimization*, *International Journal of Advanced Trends in Computer Science and Engineering, Advanced*
   Trends in Computer, Volume 8, No. 1,2,
   2019.
22. *Image Encryption by Using RC4 Algorithm in* *EUROPEAN ACADEMIC RESEARCH Vol. II,*
23. *Design Security System Based on AES and MD5 for Smart Card.* *In The 1st International Conference of Natural Science (ICNS 2016) 11-12 July 2016.*
24. *Enhancing Approach Using Hybrid Pailler and RSA For Information Security In Big data,* *Applied Computer Science, vol. 15, no. 4, pp. 63–74, 2019.*
25. *Bayesian Network Structure Learning Using Hybrid Bee Optimization and Greedy Search,* *3rd International Mediterranean, SCIENCE AND ENGINEERING CONGRESS, OCTOBER 24-26, 2018.*
26. *Time Series Prediction Using SRE- NAR and SRE- ADALINE,* *Journal of Advanced Research in Dynamical and Control Systems presents peer-reviewed survey and original research articles. ISSN: 1943-023X, 2018.*
27. *Survey and New Security methodology of Routing Protocol in AD-Hoc Network*, *The 1 st International Conference on Information Technology (IcoIT'17) Lebanese French University -*
   Erbil, Kurdistan Region – Iraq.
28. *Evaluation Of Bayesian Network Structure Learning, 2nd International Mediterranean, SCIENCE AND ENGINEERING CONGRESS, OCTOBER 25-27, 2017.*
29. *Pigeon Inspired Optimization of Bayesian Network Structure Learning and a Comparative Evaluation, Journal of Cognitive Science 20-4:535-552, 2019.*
30. *Wind Energy Proposed in Kurdistan-Iraq in Int. Journal of Engineering Research and Applications www.ijera.com ISSN: 2248-9622, Vol. 3, Issue 6, Nov-Dec 2013, pp.1531-1537*
31. *Erbil Guide Application in International Journal of Computational Engineering Research||Vol, 04||Issue, 2||.*

For more information kindly visit the google scholar
(https://scholar.google.com/citations?user=XOtPqSQAAAAJ&hl=en)

Or Erbil Polytechnic University Academic Staff
https://academicstaff.epu.edu.iq/barewabar

Review paper
Review paper in several journal like:-

- *Wireless Personal Communications*
- *International Journal of Swarm Intelligence Research (IJSIR)*
- *Advances in Science, Technology and Engineering Systems Journal*
- *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*
- *International Journal Of Computers Communications & Control*
- *Journal of Mobile Multimedia (JMM)*
- *Asian Journal of Probability and Statistics*
- *CAAI Transactions on Intelligence Technology*
- *IEEE Transactions on Intelligent Transportation Systems*

- *International Journal Of Interactive Multimedia And Artificial Intelligence.*
- *Journal of electronics MDPI*
- *Journal of applied science MDPI*

Member in Scientific Conference

- *International Conference on Information Technology (IcoIT'17).*
- *International Engineering Conference (IEC7) 2021.*
- *International Engineering Conference (IEC8) 2022.*
- *International Engineering Conference (IEC9) 2023.*
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