Rami S. Alkhawaldeh

The University of Jordan, P.O. Box 2595 – 77110 Aqaba
Jordan
3^{rd} *March* 1985 • +962 (77) 088 1883
+962 (3) 209 0450 (ext. 36066)
r.alkhawaldeh@ju.edu.jo • ralkhawaldeh
ramikhawaldeh • r.alkhawaldeh
0000-0002-2413-7074 • Rami-Alkhawaldeh
AAL-9097-2020 • 00962770881883
Rami S. Alkhawaldeh

Success is a journey, not a destination
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BIOGRAPHY

Dr. Rami S. Alkhawaldeh received his B.S. degree in Computer Information Systems from Yarmouk University, Irbid, Jordan, in 2007. He continued his education and obtained an MSc. degree in Computer Information Systems from the University of Jordan, Amman, Jordan, in 2010. Dr. Alkhawaldeh further pursued his academic journey and successfully completed his PhD degree in computing science from Glasgow University, the UK, in 2017.

From 2010 to 2012, Dr. Alkhawaldeh served as a Lecturer at the University of Jordan, where he contributed to the education and development of students in the field of Computer Information Systems. Since February 2021, he has held the position of associate professor in the Computer Information Systems Department at the University of Jordan, further enriching the academic environment and sharing his expertise with students and colleagues.

Dr. Alkhawaldeh's research interests encompass a range of cutting-edge fields, including Artificial Intelligence, Deep and Machine Learning, Information Retrieval, VoIP, and Wireless networks. Through his scholarly pursuits, he explores innovative approaches and contributes to advancements in these areas, fostering progress and understanding in the broader scientific community.
With his academic achievements, teaching experience, and research contributions, Dr. Rami S. Alkhawaldeh exemplifies a dedicated and accomplished professional in the field of Computer Information Systems. His expertise and passion continue to inspire and guide future generations of students and researchers in their pursuit of knowledge and excellence.

EDUCATION

Yarmouk University **Irbid, Jordan**
Bachelor of Computer Information Systems, 78.7 very good *2003–2007*

8^{th} rank out of 342 students.

- Coursework in Web Design and Development.
- Computational Science and Engineering coursework.
- Software Process Improvement.
- Certificate in Computer Applications Programming.
- Application Developer Certification.

The University of Jordan **Amman, Jordan**
M.Sc. Computer Information Systems, 3.75 of 4 (Excellent) *2007–2010*
1^{th} rank out of 25 students.

- Image Processing and Applications.
- Artificial Intelligence and Expert Systems.
- Information Systems and Information Thinking.
- Database Systems and Distributed Information Systems.
- Machine Learning and Big Data Management.
- Multimedia Information Systems and Signal Processing.

Thesis Title: *Ant Colony Optimization for VoIP Quality Assessment*

University of Glasgow **United Kingdom, Glasgow, Scotland**
Ph.D. Computing Science, Excellent *2012–2016*
QS 5 stars, ranked in 2024 76^{th}, in TIMES 82^{th}, and in SHANGHAI 101^{th}

- Information Retrieval and Natural Language Processing in Search Engines.
- Machine and Deep Learning and Data Mining.
- Peer-to-Peer Overlay Networks and Information Retrieval Networks.
- Clustering and Distributed Computation.
- Teaching skills.
- Communication skills.
- Self-confidence and NLP skills.

Thesis Title: *Query Routing in Cooperative Semi-structured Peer to Peer Information Retrieval Networks (`http://theses.gla.ac.uk/7849/`).*

Thesis summary: I proposed an intelligent routing technique over semi-structured peer-to-peer information retrieval networks. The semi-structured peer-to-peer information retrieval network was built using two phases; Intra-peer and Inter-peer Clustering. In Intra-peer Clustering, the documents within each peer are clustered to form lexically coherent topical clusters, while in Inter-peer Clustering the Cluster centroids collected from across peers are then clustered into k clusters. A separate super-peer then handles each of the resultant k clusters of centroids. However, on the semi-structured peer-to-peer information retrieval network, I have three routing query techniques from the contribution of the thesis; Inverted Peer Index (IPI), learning to route and reputation-based query routing.

EXPERIENCES

Ministry of Education **Jerash, Jordan**
Computer Teacher *2007–2010*

Amman - Al Abdali, P.O.Box 1646 code 11118.

Detailed achievements:

- Successfully improved student participation in the classroom through the integration of creative role-playing exercises.
- Developed a program to work with students and increase interest in higher learning.
- Improved student's analytical skills by introducing state-of-the-art computer program technologies.

The University of Jordan **Amman, Jordan**

Lecturer, Department of Computer Information Systems *2010–2012*

Queen Rania 1st, Amman, Jordan, 119421

Detailed achievements:

- Taught introductory and upper-level courses in Computer Science.
- Wrote course materials such as syllabi, homework assignments and handouts.
- Wrote, administered and graded midterm and final examinations.
- Planned, evaluated and revised course content and course materials.
- Supervised and evaluated students' laboratory work.
- Advised and mentored undergraduate students placed on academic probation.
- Pointed students to relevant information about academic and personal support services available at the college.

University of Glasgow **Glasgow, Scotland, United Kingdom**

Tutor *2010–2012*

Glasgow, United Kingdom G12 8QQ

Detailed achievements:

- Supervised and evaluated students' laboratory work.
- Advised and mentored undergraduate students placed on academic probation.
- Taught introductory and upper-level courses in:
  - Java and Object-Oriented Programming.
  - Python.
  - Database and SQL.
  - Theory of Algorithm.
  - Machine Learning.
  - Information Retrieval and Natural Language Processing.

The University of Jordan **Aqaba, Jordan**

Assistant Professor, Department of Computer Information Systems *2017–2021*

King Hussein International Airport St The University of Jordan – Aqaba branch 77110

Bachelor Courses Taught:

1. Artificial Intelligence.
2. Machine and Deep learning.
3. Data warehouse and Data Mining.
4. Principle of Data Science.
5. Computer Network and Data Communication.
6. Computer Graphics.
7. Data structure and Theory of Algorithms.
8. Multimedia Systems.
9. Image and Signal Processing.
10. Social Media and Big Data.
11. Programming Languages (C++, Java, Python, Matlab, ..etc.)
12. Discrete Mathematics.
13. Principle of Statistics.

Master Courses Taught:

1. Artificial Intelligence.
2. Computational Intelligence.
3. Advanced Deep and Machine Learning.
4. Advanced Data Science.
5. Theory of Algorithms.

The University of Jordan **Aqaba, Jordan**
Associate Professor, Department of Computer Information Systems *2021–Present*
King Hussein International Airport St The University of Jordan – Aqaba branch 77110

Bachelor Courses Taught:

1. Artificial Intelligence.
2. Machine and Deep learning.
3. Data warehouse and Data Mining.
4. Principle of Data Science.
5. Computer Network and Data Communication.
6. Computer Graphics.
7. Data structure and Theory of Algorithms.
8. Multimedia Systems.
9. Image and Signal Processing.
10. Social Media and Big Data.
11. Programming Languages (C++, Java, Python, Matlab, ..etc.)
12. Discrete Mathematics.
13. Principle of Statistics.

Master Courses Taught:

1. Artificial Intelligence.
2. Computational Intelligence.
3. Advanced Deep and Machine Learning.
4. Advanced Data Science.
5. Theory of Algorithms.

The University of Jordan **Aqaba, Jordan**
Director of Computer Center *2018–2020*
King Hussein International Airport St The University of Jordan – Aqaba branch 77110

Tasks: plans, organizes, and manages the administrative and technical aspects of the University's campus computing resources. Managing of a wide range of areas of responsibility, such as the enterprise resource planning system, servers, software application development, user training, micro-computer installation and maintenance, user support, the University's open-access computer labs, and policy development regarding computing services for students, faculty, and staff. Supervising the departmental staff in their support of the University's computing environment, develops goals and objectives.

The University of Jordan **Aqaba, Jordan**
Head of the computer information systems and Business Information Technology departments *2021–Present*
King Hussein International Airport St The University of Jordan – Aqaba branch 77110

Task: My ultimate responsibility is to ensure the overall success and growth of the CIS and BIT departments, providing high-quality education, fostering innovation, and preparing students for successful careers in the field of computer information systems and business information technology.

MEMBERSHIP AND ACTIVITIES

MEMBERSHIP

I am a member in a set of committees as follows:
- Association for Artificial Intelligence and Entrepreneurship.
- College Postgraduate Program Coordinator.
- Scientific Research Committee.
- Leadership and Creativity Club Committee.
- Quality and Accreditation Committee.
- University Proficiency Committee.

- College Student Affairs Committee.
- Social committee for internal and external affairs.
- Committee for the reception of new students at the university.
- Scientific Cultural Committee.
- University Election Committee.
- University Marketing Committee.
- Faculty Appointment Committee.
- Committee for updating the website of the University of Jordan.
- Organizing committee for a scientific day at the College of Information Technology Systems.
- Committee to create a cybersecurity and smart networks program.
- Committee to create programs in the University.

ACTIVITIES

- Organizer in 13^{th} International Forum on Knowledge Asset Dynamics IFKAD 2018, Special Track Knowledge-Based Ecosystems for Technology Entrepreneurship and Innovation.
- keynote speaker in International Conference on Business Environment in Digital Economy and Data Science 2020.
- Participating in Prestigious Conferences.
- Reviewers in some prestigious journals:
  - IEEE Internet of Things.
  - International Journal of Intelligent Systems.
  - Applied Soft Computing.
  - International Journal of Computer Vision.
  - Pattern Recognition.
  - IEEE Journal of Biomedical and Health Informatics.
  - Computers in Biology and Medicine.
  - Information Sciences.
  - Knowledge-Based Systems.
  - Artificial Intelligence Review.
  - Computerized Medical Imaging and Graphics.
  - Information Processing and Management.
  - Neural Computing and Applications.
  - Journal of Ambient Intelligence and Humanized Computing.
  - IEEE Intelligent Systems.
  - Expert Systems with Applications.
  - Cognitive Computation.
  - Neurocomputing.

CERTIFICATES AND AWARDS

- Scholarship for attending a conference in Madrid/Spain, 2023.
- Scholarship for teaching in Germany from Erasmus+, 2023.
- Information Retrieval in Arabic from Qatar University Summer 2021.
- Masterclass: Python 3 programming June 19, 2021.
- Deep learning, Sept. 10, 2021.
- Scholarship to pursue my PhD in Glasgow University from the University of Jordan October 2012-October 2016.

- SIGIR Student Travel Grants to intend CIKM conference 2016 and to present my accepted paper
- CCNA (Cisco Certified Network Associate) course, on Oct 2008 from Jordan University.
- Robotics NTX LEGUO, December 12-23 2009 in Jordan University.
- ASP.net (Active Server Pages .NET Framework) course, on Feb 2010 from Jordan University.
- Presentation Skills training course, on Feb 2010 from Jordan University.
- Academic Staff Development Workshops 23 January – 25 January 2017, Jordan.
- Attending a Workshop in Smart Coder. August 19 2017, Jordan.

LANGUAGES

Arabic (mother tongue):

Reading ■■■■■
Writing ■■■■■
Speaking ■■■■■

English:

Reading ■■■■■
Writing ■■■■■
Speaking ■■■■■

REFERENCES

- Prof. Joemon M. Jose
  University of Glasgow
  School of Computing Science
  telephone: +1413301636
  email:Joemon.Jose@glasgow.ac.uk
  Sawb 202, 18 Lilybank Gardens, Glasgow G12 8QQ

- Prof. Khalil EL-Hindi
  King Saud University
  College of Computer and Information Sciences
  telephone: +966583378881
  email: khindi@ksu.edu.sa, kelhindi@gmail.com
  Riyadh 11543, Kingdom of Saudi Arabia

- Dr. Mousa AL-Akhras
  The University of Jordan
  Department of Computer Information Systems
  telephone: +962790142169
  email:mousa.akhras@ju.edu.jo
  Amman 11942, Jordan

- Dr. Moatsum Alawida
  Abu Dhabi University
  Department of Computer Sciences
  telephone: +971523713314
  email: Moatsum.alawida@adu.ac.ae
  Abu Dhabi, 59911, United Arab Emirates

PUBLICATIONS (Selected)

[1] **Alkhawaldeh, Rami S** and Saja Al-Dabet. Unified framework model for detecting and organizing medical cancerous images in iomt systems. *Multimedia Tools and Applications*, pages 1–28, Oct 2023.

[2] Mohammad H. Saleh, **Rami S. Alkhawaldeh**, and Jamil J. Jaber. A predictive modeling for health expenditure using neural networks strategies. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(3):100–132, Sept 2023.

[3] Rania Al Omari, **Alkhawaldeh, Rami S.**, and Jamil J. Jaber. Artificial neural network for classifying financial performance in jordanian insurance sector. *Economies*, 11(4), 2023.

[4] I AlHadid, E Abu-Taieh, M Rawajbeh, **Alkhawaldeh, Rami S**, S Khwaldeh, S Afaneh, A Alrowwad, and D Alrwashdeh. Evaluating the influence of security considerations on information dissemination via social networks. *International Journal of Data and Network Science*, 7(4):1471–1484, 2023.

[5] KC Ravi Bikram, Thair Al-Dala'in, **Alkhawaldeh, Rami S**, Nada AlSallami, Oday Al-Jerew, and Shahad Ahmed. Taxonomy of ar to visualize laparoscopy during abdominal surgery. In *International Conference on Interactive Collaborative Robotics*, pages 292–302. Springer, 2023.

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[7] R Masadeh, D Almajali, A Alrowwad, **Alkhawaldeh, Rami S.**, S Khwaldeh, and B Obeid. Evaluation of factors affecting university students' satisfaction with e-learning systems used during covid-19 crisis: A field study in jordanian higher education institutions. *International Journal of Data and Network Science*, 7(1):199–214, 2023.

[8] Zahra Sadeghi, Roohallah Alizadehsani, Mehmet Akif Cifci, Samina Kausar, Rizwan Rehman, Priyakshi Mahanta, Pranjal Kumar Bora, Ammar Almasri, **Rami S. Alkhawaldeh**, Sadiq Hussain, Bilal Alatas, Afshin Shoeibi, Hossein Moosaei, Milan Hladik, Saeid Nahavandi, and Panos M. Pardalos. A brief review of explainable artificial intelligence in healthcare, 2023.

[9] Nabin Shrestha, Salma Hameedi, **Alkhawaldeh, Rami S.**, and Omar Hisham Rasheed Al-sadoon. Taxonomy for an automated sleep stage scoring. In Kevin Daimi and Abeer Al Sadoon, editors, *Proceedings of the 2023 International Conference on Advances in Computing Research (ACR'23)*, pages 17–29, Cham, 2023. Springer Nature Switzerland.

[10] Evon Abu-Taieh, Issam AlHadid, Ra'ed Masa'deh, **Alkhawaldeh, Rami S.**, Sufian Khwaldeh, and Ala'aldin Alrowwad. Factors influencing youtube as a learning tool and its influence on academic achievement in a bilingual environment using extended information adoption model (iam) with ml prediction; jordan case study. *Applied Sciences*, 12(12), 2022.

[11] Evon M Abu-Taieh, Issam AlHadid, Sabah Abu-Tayeh, Ra'ed Masa'deh, **Alkhawaldeh, Rami S**, Sufian Khwaldeh, Ala'aldin Alrowwad, et al. Continued intention to use of m-banking in jordan by integrating utaut, tpb, tam and service quality with ml. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3):120, 2022.

[12] Evon M Abu-Taieh, Issam AlHadid, Khalid Kaabneh, **Alkhawaldeh, Rami S**, Sufian Khwaldeh, Ra'ed Masa'deh, Ala'Aldin Alrowwad, et al. Predictors of smartphone addiction and social isolation among jordanian children and adolescents using sem and ml. *Big Data and Cognitive Computing*, 6(3):92, 2022.

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[26] Moatsum Alawida, Azman Samsudin, Je Sen Teh, and **Alkhawaldeh, Rami S**. A new hybrid digital chaotic system with applications in image encryption. *Signal Processing*, 160:45–58, 2019.

[27] Ammar Almasri, Erbug Celebi, and **Alkhawaldeh, Rami S**. Emt: Ensemble meta-based tree model for predicting student performance. *Scientific Programming*, 2019, 2019.

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