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#### PERSONAL DATA

DOB: 01 Mar 1974  
Marital status: Married  
Nationality: Jordanian  
Google scholar link:

<https://scholar.google.com/citations?user=r0s17jIAAAAJ&hl=en>

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#### EDUCATION

- Doctor of Philosophy (Ph.D.), Management Information Systems (**Internet of Things**), Girne American University, Cyprus, 2018.
  - Master of Business Administration (MBA/MIS), Al-Balqa Applied University, Joint Program with Florida Atlantic University (USA), Jordan, 2014.
  - BSc. Computer Science, Yarmouk University, Jordan, 1996.
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#### RESEARCH INTEREST

- Internet of Things
  - Smart home applications
  - Innovation
  - Knowledge management systems
  - E-Services
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#### STATEMENT OF TEACHING AND RESEARCH

I enjoy interacting with my student, motivating their interest, and unleashing their energy. I am a big believer in harnessing the power of technology to promote students' learning and active participation. I have learned to adapt to variation in students' capabilities. I am an advocate of leveraging problem and project-based teaching to build and improve technical and transferable skills that are needed for the market.

Internet of Things (IoT) is an emerging paradigm that combines digital and physical component to create new product. It has been world widely used in many domains and applications such as smart environment, smart transportation, smart agriculture systems, smart water management, smart healthcare, etc. IoT plays significant roles in improving the wellbeing of human at little cost.

In my research, I have focused on improving routing efficiency in IoT by introducing a novel objective function with new metrics for routing in low power

and lossy networks (RPL). Moreover, I have improved the current RPL multicasting scheme to avoid congestion by allocating an idle channel for multicasting.

In addition to routing in IoT, I have focused on building e-services and IoT applications that will improve the quality of life. For example, I have used TAM to test the acceptance of the e-voting system from voter's perspective and assessed the readiness of the system using web and smartphones apps.

Currently, I am focusing on applications of IoT in smart homes and Wireless body area sensor networks (WBASNs) with contemporary uses in healthcare, fitness, and entertainment.

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#### PROFESSIONAL EXPERIENCE

- **System Coordinator and Data Analyst with the Adaptive TechSoft (ATS), creating a digital campus at Jadara University by automating the university processes and services, October 2024 – Till now.**
- **Director of the E-Learning Center Oct. 2024 – Present.**
- **Jordan, JADARA University: Head of Computer Science Department: Oct. 2023 – Oct. 2024.**
- **Jordan, JADARA University: Head of “Internet of Things” Department: Oct. 2022 – Oct. 2023.**
- **Jordan, JADARA University: Head of Computer Science Department: Oct. 2021 – Oct. 2022.**
- **Jordan, JADARA University: Assistant of Dean for Quality Affairs: Oct. 2021 – Oct. 2024.**
- **Jordan, JADARA University: Assistance Prof. in Internet of Things Dept.: Oct. 2019 – Till now**
  - Expert Systems, Artificial Intelligent
  - Computer programming course (Java ,C++)
  - System Analysis, Introduction to IT, Fundamentals in Software engineering, Introduction to Programming and OOPs, Human and Computer Interactions.
  - Networks& Data Communications,
- **Jordan, JADARA University: Lecturer, Oct. 2018 – Jul. 2019**
  - Computer programming course (Visual Basic.Net, C++)
  - System Analysis, Database Design, Knowledge Management Systems, Decision Support Systems courses
  - Introduction to statistics

- **KSA, Manarat Alsalheen Educational Company: Direct supervisor, Vice Manager, and teacher assistant**  
**Sep. 1999 - Aug 2014**
  - Teaching Computer and Mathematics courses.
  - Developer and supervisor of information technologies.
  - Member of managerial development
  - Manager of company web site.
  - Member of the senior management in administrative and strategic planning.
- **Jordan, MOE Schools, Khalid Bin Al-Walid school: Teacher**  
**Sep. 1998 - Sep. 1999**
  - Teaching Computer courses.
- **Jordan, Military Schools: Teacher,**      **Dec. 1997 - Aug. 1998**
  - Teaching Computer and Mathematics courses.
- **Yarmouk University Computer Center: Teacher**  
**Mar. 1997 – Dec. 1997**
  - Workshops in DOS, Win 95 and MS Word.

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#### JOURNAL ARTICLES

- MT Alrashdan, MA Wahed, **E Aljarrah**, M Tubishat... -, "The impact of data recovery criteria, data backup schedule and data backup processes on the efficiency of data recovery management in data centers", *International Journal of Data and Network Science*, 2024.
- **E Aljarrah** , "AI-based model for Prediction of Power consumption in smart grid-smart way towards smart city using blockchain technology", *Intelligent Systems with Applications* (2024), 200440.
- N Thalji, **E Aljarrah**, MH Almomani, A Raza, H Migdady, L Abualigah, "Segmented X-ray image data for diagnosing dental periapical diseases using deep learning", *Data in Brief* , (2024) ,54, 110539.
- Thalji, N. J., **Aljarrah, E.**, Rateb, R., & Al-Shorman, A. R. M. (2023). New Arabic Root Extraction Algorithm. *International Journal of Advanced Computer Science and Applications*, 14(5).
- Jarrah, B., Jarrah, M., Almomani, S., **Aljarrah, E.**, & Al-Rashdan, M. (2023). The effect of reliable data transfer and efficient computer network features in Jordanian banks accounting information systems performance based on hardware and software, database and number of hosts. *International Journal of Data and Network Science*, 7(1), 357-362.
- Alzboon, M. S., Alqaraleh, M. K., **Aljarrah, E.** M., & Alomari, S. A. (2022). Semantic Image Analysis on Social Networks and Data Processing: Review and Future Directions. *Handbook of Research on Foundations and Applications of Intelligent Business Analytics*, 189-214.

#### PUBLICATIONS

- Alzboon, M. S., **Aljarrah, E.**, Alqaraleh, M., & Alomari, S. A. (2021). Nodexl Tool for Social Network Analysis. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(14), 202-216.
- SA Alomari, M Alqaraleh, **E Aljarrah**, MS Alzboon. (2020). TOWARD ACHIEVING SELF-RESOURCE DISCOVERY IN DISTRIBUTED SYSTEMS BASED ON DISTRIBUTED QUADTREE. *Journal of Theoretical and Applied Information Technology*, 98(20).
- Alomari, S. A., AL SALAIMEH, S. A. F. W. A. N., **AL JARRAH, E.** M. R. A. N., & ALZBOON, M. S. (2020). Enhanced Logistics Information Service Systems Performance: Using Theoretical Model and Cybernetics' Principles. *WSEAS Transactions on Business and Economics*, 17(29), 278-287.
- **Aljarrah, E.** (2017), Deployment of Multi-Fuzzy Model Based Routing in RPL to Support Efficient IoT, *International Journal of Communication Networks and Information Security (IJCNIS)*, 9(3). ("The journal is indexed in SCOPUS").
- **Aljarrah, E.**, Yassein, M. B., & Aljawarneh, S. (2016, September). Routing protocol of low-power and lossy network: Survey and open issues, , " 2016 International Conference on Engineering & MIS (ICEMIS), Agadir, 2016. (pp. 1-6). IEEE publication (**Scopus**)
- **Aljarrah, E.**, Elrehail, H., & Aababneh, B. (2016). E-voting in Jordan: Assessing readiness and developing a system. *Computers in Human Behavior*, 63, 860-867. Elsevier Publ. (**SSCI (ISI), SCOPUS, ABDC List**)

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#### LANGUAGES

English, Arabic

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#### TECHNICAL SKILLS

- Programming Languages: **VB, Pascal, C, C++, C#, JAVA**
  - Database: **MS Access, Using Oracle**
  - CAD Packages: **Adobe Photoshop, Corel Draw**
  - Technical support: **MS Windows 10, Linux.**
  - Office Packages: **MS Office.**
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#### REFERENCES

Available up on request

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