BASHAR AWAD AL-SHBOUL

Associate Professor of Information & Telecommunications Technology Engineering

(Information Retrieval, Natural Language Processing, Data & Text Mining, Machine Learning, Knowledge Management & Semantic Web)

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Education	• **Korea Advanced Institute of Science and Technology (KAIST)** *Daejeon, South Korea* **(2006 to 2012)** PhD, Information Retrieval & Natural Language Processing
	• **The University of Jordan,** *Amman, Jordan* **(2003 to 2006)** MSc. in Computer Science, Artificial Intelligence
	• **Al-Balqa' Applied University,** *Al-Salt, Jordan* **(1999 to 2003)** BSc. in Information Technology
	• **Islamic Educational College**, Amman, Jordan **(1985 to 1999**) KG, Primary, Secondary, and High School: Scientific Stream
Academic Experience	• Part-time Lecturer, The University of Jordan (Mar 2004 to Mar 2006)
	• Full-time Lecturer, The University of Jordan (Mar 2006 to Aug 2006)
	• Research Assistant, The University of Jordan (Mar 2004 to Aug 2006)
	• Assistant Professor (Jun 2012 to Dec 2016)
	• Invited Professor, Web Science & Technology Division, Korea Advanced Institute of Science and Technology (Aug 2014 to Feb 2015)
	• **Associate Professor (Dec 2016 to now**)
	• **Adjunct Professor, Rochester Institute of Technology, UAE (2024 – now)**
	• **Adjunct Professor, Westcliff University, USA (2024 – now)**
Non-Academic Experience	• Assistant Dean for Lab Affairs, King Abdullah II School for Information Technology, The University of Jordan (2013)
	• Assistant Dean for Technology Affairs / Journals Manager, Deanship of Academic Research & Quality Assurance (2015 to 2017)
	• Assistant Dean for Lab Affairs, King Abdullah II School for Information Technology, The University of Jordan (2018 to 2018)
	• Assistant Dean for Automated Exams Management, King Abdullah II School for Information Technology, The University of Jordan (2018 to 2019)
	• Deputy Director of Information Technology Center at The University of Jordan (2019 to 2020)
	• Director of Information Technology Center at The University of Jordan (2020 to 2022)
Professional Experience	• Local consultant with KTNET/KOICA project in collaboration with Jordanian government: Jordan Online E-Procurement System (JONEPS) (Jan 2016 to Jun 2017)
	• Regional developer/consultant at PricewaterhouseCoopers (PwC) Assurance Center of Excellence (ACE) (May 2016 to Aug 2017)
	• Journals Manager, and Technical consultant at Scientific Research Support Fund (SRSF), Ministry of Higher Education and Scientific Research (Aug 2017 to Aug 2018)
	• **Board Member, Talal Abu-Ghazaleh, AIMICT, Amman, Jordan (May 2021 to Now)**
	• **Associate Consultant for Eight Dimension, Doha, Qatar (Jan 2022 to Now)**
	• **Consultant, ESCWA, UN, Amman, Jordan (Nov 2023 to May 2024)**
Grants & Funded Research	• Plagiarism Detection Application, The University of Jordan (2013 – 2015)
	• Factors impacting the adoption of the of Capability Maturity Model Integration (CMMI) among Jordanians software organizations, The University of Jordan (2016 – 2019)
	• Developing automatic spraying system in vinyl houses, The University of Jordan – ongoing (2016 – 2019)
	• Restructuring & modernization of the deanship of academic research procedures and processes to enhance their efficiency and effectiveness, The University of Jordan (2016 – 2017)
	• Modernization of Institutional Management of Innovation and Research in South Neighboring Countries (Erasmus+) (2016 – 2018)

	• Pathway in Forensic Computing / FORC (Erasmus+) (2018 – 2020) • Inventory of the Registers of the Sharia'a Court at the City of Jerusalem (2018 – 2020)
Conferences (Last 5 Year)	• The 16th International Conference on Management of Digital EcoSystems, Napoli, Italy (Author), 2024 • The 14th International Conference on Management of Digital EcoSystems, Venice, Italy (Author), 2022 • The 12th International Conference on Computational Collective Intelligence, Hendaye, France (Co-Author), 2019
Workshops (Last 5 Year)	• Workshop on Digital Participation, Ministry of Digital Economy & Entrepreneurship, Jordan, 2023 • Inventory of the Registers of the Sharia'a Court at the City of Jerusalem, Jordan (Lecturer / Trainer), 2020
Training (Last 5 Year)	• Digital Forensics and Incident Response A, CyberShield, Jordan (2023) • Decision Support using Advanced Excel Features, The Jordanian Civil Aviation Regulatory Commission, Amman, Jordan (Lecturer), 2021 • Digital Forensics using Autopsy – BASIS Technologies (Online - Corona), 2021 • Network Security/Cybersecurity - Cisco (Online - Corona), 2021 • Linux - Cisco (Online - Corona), 2021 • Computer Forensics, The University of Jordan (FORC Project), 2020 • Biometric Forensics, The University of Jordan (FORC Project), 2020 • University of Cagliari, Italy (FORC Project), 2019 • University of Middlesex, London, UK (FORC Project), 2019 • PSUT, Amman, Jordan (FORC Project), 2019
Selected Publications (Last 5 Year) **Quartile & Percentiles are determined by Scopus statistics of 11/2024**	• Almahmoud, Sawsan; Hammo, Bassam; **Al-Shboul, Bashar**; Exploring non-human traffic in online digital advertisements: analysis and prediction, Computational Collective Intelligence: 11th International Conference, ICCCI 2019, Hendaye, France, September 4–6, 2019, Springer Lecture Notes in AI (LNAI) Proceedings, Part II 11, 663-675, 2019, Springer International Publishing **(Q3, 38%)** • ADHIM, KHALID K; HUDAIB, AMJAD; **AL-SHBOUL, BASHAR**; Efficient requirement prioritization based on enhanced multi-verse optimizer, Journal of Theoretical and Applied Information Technology,97,19,2019 **(Q4, 17%, Class A previously)** • Almahmoud, Sawsan; Hammo, Bassam**; Al-Shboul, Bashar**; Obeid, Nadim; A hybrid approach for identifying non-human traffic in online digital advertising, Multimedia Tools and Applications,1-34, 2022, Springer US **(Q1, 84%)** • Al-Zubi, Sawsan; Awaysheh, Feras M; **Al-Shboul, Bashar Awad**; Arabic Question Answering System for Information Retrieval on Large-scale Image Objects,2021 Second International Conference on Intelligent Data Science Technologies and Applications (IDSTA), 162-170, 2021, IEEE **(SCOPUS Indexed)** • Beseiso, Majdi; Tripathi, Samiksha; **Al-Shboul, Bashar**; Aljadid, Renad; Semantics based English-Arabic machine translation evaluation, Indonesian Journal of Electrical Engineering and Computer Science,27,1,189-197,2022, **(Q3, 43%)** • Al-Smadi, Faris; **Al-Shboul, Bashar**; Al-Darras, Duha; Al-Qudah, Dana; Aspect-Based Sentiment Analysis of Arabic Restaurants Customers' Reviews Using a Hybrid Approach, Proceedings of the 14th International Conference on Management of Digital EcoSystems, 23-128,2022, **(SCOPUS Indexed)** • **Al-Shboul, Bashar**; Al-Darras, Duha; Al-Qudah, Dana; A Semantic Text Expansion for Paraphrasing Identification in Arabic Microblog Posts, Proceedings of the 14th International Conference on Management of Digital EcoSystems,129-135,2022, **(SCOPUS Indexed)** • Al Qudah, DA; **Al-Shboul, B**; Al-Zoubi, A; Al-Sayyed, R; Cristea, AI; Investigating users' experience on social media ads: perceptions of young users. Heliyon 6 (7), 2020, **(Q1, 82%)**

- Abu-Salih, Bilal; Alhabashneh, Mohammad; Zhu, Dengya; Awajan, Albara; Alshamaileh, Yazan; **Al-Shboul, Bashar**; Alshraideh, Mohammad; Emotion detection of social data: APIs comparative study, Heliyon,9,5, 2023, Elsevier **(Q1, 82%)**
- **Al-Shboul, Bashar**; Al-Qudah, Dana A; Boshmaf, Hadeel; Abu-Salih, Bilal; Beseiso, Majdi; Al-Saqqa, Samar; Arabic Wikipedia users' personalized behavior analysis considering gender gap, PloS one (19) 10, 2024 **(Q1, 89%)**
- Shbool, Mohammad A; Al-Dmour, Rand; **Al-Shboul, Bashar Awad**; Albashabsheh, Nibal T; Almasarwah, Najat; Real estate decision-making: precision in price prediction through advanced machine learning algorithms, International Journal of Housing Markets and Analysis, 2025, Emerald Publishing Limited **(Q2, 71%)**
- Duha Al-Darras, Nesreen Hamad, and Bashar Al-Shboul, Exploring Clustering Improvement: A Comparative Study of Utilizing Metaheuristics and Initialization Strategies, Communications in Computer and Information Science, 2025 **(Q3, 39% to appear)**
- Bashar Al-Shboul, Reem Abudayah, and Dana Al-Qudah, Stylometric Features Embedding For The Task Of Author Attribution, Communications in Computer and Information Science, 2025 **(Q3, 39% to appear)**

Graduate Courses	- Web Economics (MSc of Web Intelligence) - Web Semantics (MSc of Web Intelligence) - Decision Support for Public Sector (MSc of eGovernment) - Research Methodology for Computer Science (MSc of Computer Science) - Database Systems (MSc of Computer Information Systems) - eGovernment Infrastructure & Technology (MSc of eGovernment)

Undergraduate Courses

- King Abdullah II School of Information Technology
  - First Year Courses
    - C++ Programming
    - Digital Logic
    - Discrete Mathematics
    - Remedial Information Technology
    - Fundamentals of Information Technology
    - Basics of Information Technology
    - Web Application Development – 1
  - Second Year Courses
    - Advanced Web Programming / Web Application Development – 2
    - Statistical Packages
    - Web Publishing
  - Third Year Courses
    - E-Business
    - Decision Support Systems
    - Ontologies & Knowledge Graphs (Department of AI)
  - Fourth Year Courses
    - Semantic Web
    - Document Analysis & Recognition
    - Information Retrieval
- School of Business
  - Expert Systems & Decision Support
  - eCommerce
- Others
  - Client Programming (REACT / REACT Native)
  - IT Project Management

Graduate Theses & Dissertations Supervision	- **Ph.D. in Computer Science**
	  - An enhanced multi-verse optimizer (emvo) for solving the problem of software requirements prioritization, Ibrahim, Khalid Khalis, 2019
	  - Exploring non-human traffic in online digital advertisements: analysis and prediction, al-Mahmoud, Sawsan Basem, 2020
	  - An Ontology-Based Differential Diagnosis System for vitamin deficiencies Using A-Box Abduction, Al-Darras, Duha, **(2024 - now)**
	
	- **M. Sc. in Web Intelligence**
	  - Employee-based e-government readiness and enhancement benchmarking marco-index(egre), Mohammad, Dana Mustafa Ahmad. 2018
	  - Probabilistic eeg event identification and prediction, Abdullah, Aseel Burhan. 2018
	  - Paraphrase identification on arabic microblog posts using semantic text expansion, Al-Darras, Duha Ahmad. 2019
	  - Topic-based news genre classification of Arabic news corpus utilizing various query expansion methods, Hakh, Heba Mohammad. 2019
	  - Aspect-based sentiment analysis of Arabic customers' reviews using machine learning, Al-Smadi, Faris. 2019
	  - Ontology-based system for matching job descriptions to job seekers, Hattab, Samer Khaled Tawfeeq. 2019
	  - Automatic medical ontology generation for Arabic question answering system, Hassan, Duha A. 2020
	  - Arabic question answering system for information retrieval on image objects, Al-Zubi, Sawsan Hashem. 2020
	  - Building an Arabic ontology of Islamic resources for religious information search, Zayed, Rana Hasan Hasan, 2023
	  - The Relation between Ontology and the e-Commerce Product Recommendation for the IT Customers, Oleimat, Abdallah, 2024
	  - A study on arabic poetry genre classification, Abo-Rayash, Eman, 2025
	  - A Comprehensive Study on the Utilization of Arabic Large Language Models in Arabic Information Retrieval, Abul Fillat, Tayseer, **(2024 – now)**
	
	- **M. Sc. in Computer Information Systems**
	  - An ontology-based system to assist in prescribing the appropriate drugs, Al-Muhtaseb, Worood Ibrahim Abdel-Haleem. 2022
	  - An ontology guided question answering system for medical diagnosis, Al-Btoush, Nusaiba Yahya Basheer. 2022