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CURRICULUM VITAE

Tarek Ghazi Kanan

Associate Professor
Chair of Artificial Intelligence Department
Faculty of Sciences and Information Technology
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1. **Personal Data**
   Date of Birth: 1/6/1978   Nationality: Jordanian

2. **Education**
   - **2015: PhD degree** in Computer Science and Applications, Virginia Tech., Virginia-USA (GPA 3.75-Excellent)
   - **2005: Master's degree** in Computer Information Systems, Yarmouk University, Irbid-Jordan (88.8%- Excellent, Ranked 1st among 32 graduates)
   - **2001: Bachelor degree** in Computer Science, Yarmouk University, Irbid-Jordan (71.1 %-Good)
   - **1996: High school-scientific stream**, Yarmouk University Model School, Irbid-Jordan (87.3 %-V. good)

3. **Ph.D. Dissertation**
   - Arabic News Text Classification and Summarization: A Case of the Electronic Library Institute SeerQ (ELISQ), Virginia Tech, Blacksburg, Virginia, USA

4. **Employment**
   - Associate Professor, Artificial Intelligence Department, Al-Zaytonah University of Jordan, Amman-Jordan. 11/2020 – present
   - Assistant Professor, Artificial Intelligence/Computer Science Department, Al-Zaytonah University of Jordan, Amman-Jordan. 09/2017 – 10/2020
   - Assistant Professor, Software Engineering Department, Al-Zaytonah University of Jordan, Amman-Jordan. 09/2015 – 08/2017
   - Graduate Research Assistant, DLRL, Virginia Tech., Virginia-USA. 08/2012 – 06/2015
   - Graduates Teaching Assistant, CS Department, Virginia Tech., Virginia-USA. 08/2008- 05/2012
   - Al Al-Bayt University, Full-Time Lecturer, Mafraq-Jordan. 02/2007 – 07/2008

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- Amman Al-Ahlya University, Full-Time Lecturer, Amman-Jordan. 10/2006 – 02/2007
- Al-Isra Privet University, Full-Time Lecturer, Amman-Jordan. 09/2005 – 10/2006

5. <u>Research Interests</u>
- Artificial Intelligence, Text Classifications, Natural Language Processing, Machine Learning, Data Science

6. <u>Membership in Scientific Societies and Associations</u>
- **External reviewer for many international conferences and for the following journals:**
  o Information Processing and Management Journal
  o Human-centric Computing and Information Sciences
  o International Journal on Digital Libraries
  o Journal of King Saud University - Computer and Information Sciences
  o International Journal of Advanced Soft Computing and Applications

7. <u>Teaching Experience</u>
- **2015-Current,** Assistant& Associate Professor of CS & AI, AlZaytoonah University
- **Courses Taught:**
  o Smart Systems (Postgraduate)
  o Research Methods (Postgraduate)
  o Special Topics in Computer Science (Postgraduate)
  o Computer Science Seminar (Postgraduate)
  o Graduation Project
  o Artificial Intelligence
  o Operation Research
  o Probability Theory in AI
  o Algorithms
  o Technical Writing
  o Principles of Artificial Intelligence
  o Principles of Software Engineering
- **Master Students Supervision**
  o Supervised multiple Theses and starred papers at the master-degree level

8. <u>Supervision of Graduate Research</u>
- **Amal Aldajah**, Cyber-bullying and Cyber-Harassment Detection using Supervised and Unsupervised Machine Learning Techniques in Arabic Social Media Contents, 2019.
- **Odai Sadaqa,** Detecting Depression Tone that Leads to Suicide in Arabic content on Social Media using Machine Learning and Deep Learning Techniques, 2020.
- **Ashraf Al-Mhirat,** Racial discrimination detection using deep learning and machine learning techniques in Arabic social media contents, 2020.

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9. Grants

- **AlZaytoonah University of Jordan, Scientific Research Project - $21,000 (LPI). 2018-2020** "A novel approach to extract illegal and terrorist contents form Arabic social media posts using machine learning techniques
- **AlZaytoonah University of Jordan, Scientific Research Project - $20,000 (LPI). 2021-2023** "Enhancing the Teaching Process in the AI Department using the IoT and Robotics Tools"

10. Participation in or organization of curricular and/or extra-curricular activities

- Curriculum committee/Computer Science Department
- Curriculum committee/AI Department
- Curriculum committee/MSc Data Science Department
- Member of the following up of Kaffaa Exam committee
- Committee of Guidance, Equivalence, Training, and Follow-up of Graduate Students.

11. Publications
Journals

1. Kanan, Tarek; Mughaid, Ala; Al-Shalabi, Riyad; Al-Ayyoub, Mahmoud; Elbes, Mohammed; Sadaqa, Odai; Business intelligence using deep learning techniques for social media contents; Cluster Computing; 26; 2; 1285-1296; 2023; Springer US New York
2. Al–Shalabi, Riyad; Kanaan, Ghassan; Kanan, Tarek; ElBes, Mohammed; A Review Study for Arabic Machine Learning and Deep Learning Methods; 2022 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS); 225-232; 2022; IEEE
3. Kanan, Tarek; Hawashin, Bilal; Alzubi, Shadi; Almaita, Eyad; Alkhatib, Ahmad; Maria, Khulood A; Elbes, Mohammed; Improving Arabic text classification using p-stemmer; Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science); 15; 3; 404-411; 2022; Bentham Science Publishers
4. Elbes, Mohammed; Kanan, Tarek; Alia, Mohammad; Ziad, Mohammad; COVD-19 Detection Platform from X-ray Images using Deep Learning. International Journal of Advances in Soft Computing & Its Applications; 14; 1; 2022
5. Alkhatib, Ahmad AA; Abdelal, Qusai; Kanan, Tarek; Wireless Sensor Network for Forest Fire Detection and behavior Analysis. International Journal of Advances in Soft Computing & Its Applications; 13; 1; 2021
6. Hnaif, Adnan A; Kanan, Emran; Kanan, Tarek; Sentiment Analysis for Arabic Social Media News Polarity. Intelligent Automation & Soft Computing; 28; 1; 2021
7. Kanan, Tarek; Kanaan, Ghassan G; Al-Shalabi, Riyad; Aldaaja, Amal; Offensive Language Detection in Social Networks for Arabic Language

Using Clustering Techniques. International Journal of Advances in Soft Computing & Its Applications; 13; 2; 2021

8. Al-Masalha, Haya; Hnaif, Adnan A; Kanan, Tarek; Cyber-crime effect on Jordanian society; Int. J. Advance Soft Compu. Appl; 12; 3; 2020

9. Tarek Kanan, Amal Aldaaja, Bilal Hawashin, "Cyber-Bullying and Cyber-Harassment Detection Using Supervised Machine Learning Techniques in Arabic Social Media Contents," *Journal of Internet Technology*, vol. 21, no. 5, pp. 1409-1421, Sep. 2020.

10. Tarek Kanan, Bilal Hawashin, Shadi Alzubi, Eyad Almaita, Ahmad Alkhatib, Khulood Abu Maria and Mohammed Elbes, "Improving Arabic Text Classification Using P-Stemmer", Recent Advances in Computer Science and Communications (2020) 13: 1.
https://doi.org/10.2174/2666255813999200904114023

11. AlZu'bi, S., Jararweh, Y., Al-Zoubi, H., Elbes, M., Kanan, T., & Gupta, B. (2019). Multi-orientation geometric medical volumes segmentation using 3d multiresolution analysis. *Multimedia Tools and Applications, 78*(17), 24223–24248.

12. Elbes, M., Alzubi, S., Kanan, T., Al-Fuqaha, A., & Hawashin, B. (2019). A survey on particle swarm optimization with emphasis on engineering and network applications. *Evolutionary Intelligence*, 1–17.

13. Elbes, M., Almaita, E., Alrawashdeh, T., Kanan, T., AlZu'bi, S., & Hawashin, B. (2019). An indoor localization approach based on deep learning for indoor location-based services. In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)* (pp. 437–441).

14. Hawashin, B., Alzubi, S., Kanan, T. and Mansour, A. (2019), "An efficient semantic recommender method for Arabic text", *The Electronic Library,* Vol. 37 No. 2, pp. 263-280. April-2019.

15. Hawashin, B., Lafi, M., Kanan, T., & Mansour, A. (2019). An efficient hybrid similarity measure based on user interests for recommender systems. *Expert Systems*, e12471.

16. Abooraig, R., Al-Zu'bi, S., Kanan, T., Hawashin, B., Al Ayoub, M., & Hmeidi, I. (2018). Automatic categorization of Arabic articles based on their political orientation. *Digital Investigation, 25*, 24–41.

17. Abu Maria, K., Nagham, A., Kanan, Tarek., & Abu Maria, Eman. (2017). USING COGNITIVE AGENT IN MANUFACTURING SYSTEMS. *Journal of Theoretical & Applied Information Technology, 95*(10).

18. Kanan, T., & Fox, E. (2016). Automated Arabic text classification with P-Stemmer, machine learning, and a tailored news article taxonomy. *Journal of the Association for Information Science and Technology, 67*(11), 2667–2683.

19. Gruss, R., Farag, M., Kanan, T., English, M., Zhang, X., & Fox, E. (2015). Teaching big data through project-based learning in computational linguistics and information retrieval. *Journal of Computing Sciences in Colleges, 31*(2), 260–270.

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20. Kanan, T., Chandrasekar, P., Choudhury, S., Fox, E., & Giles, C. (2015). Digital Library and Archiving for Qatar. *TCDL Bulletin, 11*(2).

Conferences

1. Kanan, Tarek; Rathi, Woruod; Hawashin, Bilal; A Comparison between Machine Learning Researches that use Arabic Text: A Case Study of Social Media Datasets; 2021 International Conference on Information Technology (ICIT); 743-747; 2021; IEEE

2. Hawashin, Bilal; Mansour, Ayman; Fotouhi, Farshad; AlZu'bi, Shadi; Kanan, Tarek; A novel recommender system using interest extracting agents and user feedback; 2021 International Conference on Information Technology (ICIT); 674-678; 2021; IEEE

3. Kanan, Tarek; AbedAlghafer, Amani; Kanaan, Ghassan G; AlShalabi, Riyad; Elbes, Mohammed; AlZubi, Shadi; Arabic text categorization: A comparison survey; 2021 International Conference on Information Technology (ICIT); 739-742; 2021; IEEE

4. T. Kanan, O. Sadaqa, A. Almhirat and E. Kanan, "Arabic Light Stemming: A Comparative Study between P-Stemmer, Khoja Stemmer, and Light10 Stemmer," 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS), Granada, Spain, 2019, pp. 511-515, doi: 10.1109/SNAMS.2019.8931842

5. Hawashin, B., Mansour, A., Abukhait, J., Khazalah, F., AlZu'bi, S., Kanan, T., Obaidat, M., & Elbes, M. (2019). Efficient texture classification using independent component analysis. In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)* (pp. 544–547).

6. AlZu'bi, S., Mughaid, A., Hawashin, B., Elbes, M., Kanan, T., Alrawashdeh, T., & Aqel, D. (2019). Reconstructing Big Data Acquired from Radioisotope Distribution in Medical Scanner Detectors. In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)* (pp. 325–329).

7. Kanan, T., Obaidat, A., & Al-Lahham, M. (2019). SmartCert BlockChain Imperative for Educational Certificates. In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)* (pp. 629–633).

8. Kanan, T., Sadaqa, O., Aldajeh, A., Alshwabka, H., AlZu'bi, S., Elbes, M., Hawashin, B., Alia, M., & others (2019). A review of natural language processing and machine learning tools used to analyze Arabic social media. In *2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)* (pp. 622–628).

9. Kanan, T., Sadaqa, O., Almhirat, A., & Kanan, E. (2019). Arabic Light Stemming: A Comparative Study between P-Stemmer, Khoja Stemmer, and Light10 Stemmer. In *2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS)* (pp. 511–515).

10. Alkhatib, A., Hnaif, A., & Kanan, T. (2019). Proposed simple system for Road Traffic Counting. *International Journal of Sensors Wireless Communications and Control, 9*(2), 269–277.

11. Hawashin, B., Mansour, A., Kanan, T., & Fotouhi, F. (2018). An efficient cold start solution based on group interests for recommender systems. In *Proceedings of the First International Conference on Data Science, E-learning and Information Systems* (pp. 1–5).

12. Kanan, T., Kanaan, R., Al-Dabbas, O., Kanaan, G., Al-Dahoud, A., & Fox, E. (2016). Extracting named entities using named entity recognizer for arabic news articles. *International Journal of Advanced Studies in Computers, Science and Engineering, 5*(11), 78–84.

13. Alhoori, H., Ray Choudhury, S., Kanan, T., Fox, E., Furuta, R., & Giles, C. (2015). On the relationship between open access and altmetrics. *iConference 2015 Proceedings*.

14. Kanan, T., Zhang, X., Magdy, M., & Fox, E. (2015). Big data text summarization for events: A problem based learning course. In *Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries* (pp. 87–90).

15. Lee, S., Farag, M., Kanan, T., & Fox, E. (2015). Read between the lines: A Machine Learning Approach for Disambiguating the Geo-location of Tweets. In *Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries* (pp. 273–274).

16. Fox, E., Alhoori, H., Kanan, T., Raychoudhury, S., Samaka, M., Furuta, R., Giles, L., Roychowdhury, K., Al-maadeed, S., Impagliazzo, J., & others (2014). Electronic Library Institute-seerq (elisq). In *Qatar Foundation Annual Research Conference Proceedings Volume 2014 Issue 1* (pp. ITOP0243).

17. Yang, S., Kanan, T., & Fox, E. (2010). Digital library educational module development strategies and sustainable enhancement by the community. In *International Conference on Theory and Practice of Digital Libraries* (pp. 514–517).