CURRICULUM VITAE



Dr. Malak A. Abdullah
Associate Professor of Computer Science
Effat University, Jeddah, Saudi Arabia

Email: maabdullah@effatuniversity |
dr.malak.abdelghani@gmail.com

Website: https://sites.google.com/view/malak-abdullah/home
Google Scholar: https://scholar.google.com/citations?user=93n4ZbEAAAAJ&hl=en
ResearchGate: https://www.researchgate.net/profile/Malak-Abdullah
LinkedIn: https://www.linkedin.com/in/dr-malak-abdullah/

PROFESSIONAL SUMMARY

Dr. Malak A. Abdullah is an Associate Professor of Computer Science at Effat University, Saudi Arabia, with over 15 years of academic, research, and administrative experience. Dr. Abdullah previously served as Vice Dean of Student Affairs and Chair of the Computer Science Department at Jordan University of Science and Technology. Recognized among the **world's Top 2% of Scientists in 2025** according to the Elsevier–Stanford citation impact rankings, Dr. Abdullah specializes in Artificial Intelligence, Machine Learning, Data Science, Deep Learning, and Natural Language Processing, with more than 35 peer-reviewed publications in international journals and conferences. Areas of professional experience include academic leadership, curriculum development, graduate supervision, international collaboration, competitive programming coaching, and establishing student-led technical organizations.

EDUCATION

Ph.D. in Computer Science, University of North Carolina at Charlotte, USA, 2018
Dissertation: Deep Learning for Sentiment and Emotion Detection in Multilingual Contexts

M.Sc. in Computer Science, Jordan University of Science and Technology, Jordan, 2007
Thesis: The Chained-Cubic Tree: A New Interconnection Network (Ranked First – With Honors)

B.Sc. in Computer Science and Information Systems, Jordan University of Science and Technology, Jordan, 2004 (With Honors)

GLOBAL RESEARCH RECOGNITION

• Elsevier–Stanford Top 2% Scientists List (2025, Single-Year Impact)
Main Field: Information & Communication Technologies
Subfield: Artificial Intelligence & Image Processing

ACADEMIC & ADMINISTRATIVE EXPERIENCE

Associate Professor of Computer Science, Effat University, (2026–Present)
Associate Professor of Computer Science, JUST, (2023–Present)
Vice Dean of Student Affairs, JUST, (2024–2026)
Chair, Department of Computer Science, JUST, (2022–2024)
Deputy Director, Information Technology & Communication Center, JUST, (2019–2020)
Assistant Professor of Computer Science, JUST, (2018–2023)
Full Time Lecturer of Computer Science, JUST (2007-2015)

TEACHING EXPERIENCE

Delivered undergraduate and graduate courses across foundational and advanced levels.

Courses Taught:
• Artificial Intelligence
• Machine Learning (Undergraduate & Graduate)
• Data Science
• Python for Artificial Intelligence
• Programming Challenges
• Expert Systems
• Data Structures and Algorithms
• Data Structures Laboratory
• Object-Oriented Programming (C++)
• Object-Oriented Programming Laboratory
• Java Programming
• Web Design
• Introduction to Computer Science (C++)
• Introduction to Computer Science Laboratory
• Computer Skills
• C++ and Visual Basic for Non-Computer Science Students

COMPETITIVE PROGRAMMING & STUDENT MENTORSHIP

• Head Coach of JUST Competitive Programming and Problem-Solving Teams.
• Coached and mentored more than 100 student teams.
• Participated as team coach in 10 Arab Collegiate Programming Contests (ACPC).
• Participated as team coach in 3 International Collegiate Programming Contests (ICPC).
• Designed long-term training programs in algorithms, data structures, and competitive programming.

RESEARCH INTERESTS

Artificial Intelligence, Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Sentiment Analysis, Data Mining, Social Media Analysis, Algorithms, and Programming Languages.

RESEARCH SUPERVISION

• Supervised 15 Master's theses.
• Supervised 15 undergraduate graduation projects.

HONORS & AWARDS

• Elsevier–Stanford Top 2% Scientists Worldwide (2025).
• Best Paper Award, 16th International Conference on Information and Communication Systems (ICICS-2025), IEEE-supported.
• Bronze Paper Award at EngiTek 2025 for the paper "Lifestyle-Aware Event Recommendation for Women Using Sentence Transformer Models." IEEE-supported.
• Ph.D. Scholarship Award, Jordan University of Science and Technology.
• ACM Jordan Collegiate Programming Contest Awards for Coaches.
• Highest Student Evaluation Ratings, Computer Science Department.
• Graduate Fellowship, Jordan University of Science and Technology.

TECHNICAL SKILLS

Programming: Python, Java, C++, R, PHP, JavaScript, Oracle, Visual Basic, HTML Platforms & Tools: Windows, macOS, MS Office, Machine Learning and Data Analytics Frameworks

LEADERSHIP & PROFESSIONAL SERVICE

• IEEE Student Activities Coordinator (SAC Chair), Jordan Section (2024–2025).
• IEEE Secretary of General Activities, Jordan Section (2026–Present).
• Advisor, IEEE Computer Society Student Branch, JUST.
• Advisor, IEEE Robotics and Automation Society Student Branch, JUST.
• Founder & Academic Advisor, JUST ACM Student Chapter.
• Founder & Academic Advisor, Computing Technology Club (CTC).
• Led students in organizing workshops, competitions, hackathons, and industry-focused technical events.

COMMUNITY SERVICE & OUTREACH

• **Coordinator and Supervisor, Programming Camp at Jordan University of Science and Technology (2014):** Coordinated and supervised an intensive on-campus training camp to prepare students for international programming and problem-solving competitions.

• **Organizer, Honoring Ceremony for Janitors, Faculty of Computer & Information Technology, JUST (2013):** Planned and coordinated a formal ceremony to recognize and honor janitors working at the School of Information Technology, promoting social appreciation and community values.

• **Judge, Jordan Young Scientist (JoYS) Program (2025):** Served as a judge for a national STEM initiative encouraging school students across Jordan to conduct research and present innovative projects. The program is supported by the Embassy of Ireland, the Ministry of Education, the Crown Prince Foundation, and the Queen Rania Foundation, reflecting national and international commitment to youth empowerment through science and innovation.

SELECTED PUBLICATIONS

Author and co-author of more than 35 peer-reviewed publications in reputable international journals and conferences including IEEE, Springer, Elsevier, PeerJ, IAES, and SemEval workshops.

• Agolah, R.A., **Abdullah, M**., Mircoli, A., Al-Ayyoub, M. and Elrushaidat, D., 2025, September. Analyzing Student Behavior from Moodle Data Using Process Mining and Deep Learning. In *2025 International Conference on Cybersecurity and AI-Based Systems (Cyber-AI)* (pp. 143-148). IEEE.

• Swedat, S.A., **Abdullah, M.** and Al-Ayyoub, M., 2025, July. A Multimodal Deep Learning Approach for Characterizing the Targeted Entity in Political Memes into: Hero, Villain, Victim and Foolish. In *2025 16th International Conference on Information and Communication Systems (ICICS)* (pp. 1-6). IEEE.

• **Abdullah, Malak**, Mahmoud Al-Ayyoub, Farah Shatnawi, Saif Rawashdeh, and Rob Abbott. "Predicting students' academic performance using e-learning logs." IAES International Journal of Artificial Intelligence 12, no. 2 (2023): 831

• **Abdullah, M.,** Abujaber, D., Al-Qarqaz, A., Abbott, R. and Hadzikadic, M., 2023. Combating propaganda texts using transfer learning. IAES International Journal of Artificial Intelligence, 12(2), p.956

• Obeidat, R., Gharaibeh, **M., Abdullah**, M. and Alharahsheh, Y., 2022. Multi-label multi-class COVID-19 Arabic Twitter dataset with fine-grained misinformation and situational information annotations. PeerJ Computer Science, 8, p.e1151.

• Alzu'bi, D., **Abdullah, M.,** Hmeidi, I., AlAzab, R., Gharaibeh, M., El-Heis, M., Almotairi, K.H., Forestiero, A., Hussein, A.M. and Abualigah, L., 2022. Kidney Tumor Detection and Classification

Based on Deep Learning Approaches: A New Dataset in CT Scans. Journal of Healthcare Engineering, 2022.

• Shatnawi, F., **Abdullah, M**., Hammad, M. and Al-Ayyoub, M., 2022. Comprehensive study of pre-trained language models: detecting humor in news headlines. Soft Computing, pp.1-25.

• **Abdullah, M**., Alnore, D., Swedat, S., Khrais, J. and Al-Ayyoub, M., 2022, July. SarcasmDet at SemEval-2022 Task 6: Detecting Sarcasm using Pre-trained Transformers in English and Arabic Languages. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022) (pp. 1025-1030).

• Habash, M., Daqour, Y., **Abdullah, M**. and Al-Ayyoub, M., 2022, July. YMAI at SemEval-2022 Task 5: Detecting Misogyny in Memes using VisualBERT and MMBT MultiModal Pre-trained Models. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022) (pp. 780-784).

• Makahleh, M., Yaseen, N.B. and **Abdullah, M.,** 2022, July. JUST-DEEP at SemEval-2022 Task 4: Using Deep Learning Techniques to Reveal Patronizing and Condescending Language. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022) (pp. 308-312).

• Ali, H.H., **Abdullah, M.** & Wedyan, M. Application of machine learning techniques to predict patient's satisfaction of indoor environmental quality in Jordanian hospitals. J Ambient Intell Human Comput (2022). https://doi.org/10.1007/s12652-022-04021-6

• **Abdullah, M.,** Altiti, O., & Obiedat, R. (2022, June). Detecting Propaganda Techniques in English News Articles using Pre-trained Transformers. In 2022 13th International Conference on Information and Communication Systems (ICICS) (pp. 301-308). IEEE.

• Gharaibeh, M., Alzu'bi, D., **Abdullah, M**., Hmeidi, I., Al Nasar, M. R., Abualigah, L., & Gandomi, A. H. (2022). Radiology imaging scans for early diagnosis of kidney tumors: a review of data analytics-based machine learning and deep learning approaches. *Big Data and Cognitive Computing*, *6*(1), 29.

• **Abdullah, M**., Alnore, D., Swedat, S., Khrais, J., & Al-Ayyoub, M. (2022, July). SarcasmDet at SemEval-2022 Task 6: Detecting Sarcasm using Pre-trained Transformers in English and Arabic Languages. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022) (pp. 1025-1030).

• Makahleh, M., Yaseen, N. B., & **Abdullah, M**. (2022, July). JUST-DEEP at SemEval-2022 Task 4: Using Deep Learning Techniques to Reveal Patronizing and Condescending Language. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022) (pp. 308-312).

• Alshare, S., **Abdullah, M.,** & Quwaider, M. (2022, June). Increasing Accuracy of Random Forest Algorithm by Decreasing Variance. In 2022 13th International Conference on Information and Communication Systems (ICICS) (pp. 232-238). IEEE.

• Gharaibeh, M., Obeidat, R., **Abdullah, M**., & Al-Harahsheh, Y. (2022, June). Datasets and Approaches of COVID-19 Misinformation Detection: A Survey. In 2022 13th International Conference on Information and Communication Systems (ICICS) (pp. 337-345). IEEE.

• Wedyan, M., Ali, H., & **Abdullah, M.** (2022, June). Toward Predicting Patient's Satisfaction of Indoor Environmental Quality in Jordanian Hospitals using SVM and K-NN Machine Learning Algorithms. In *2022 13th International Conference on Information and Communication Systems (ICICS)* (pp. 239-245). IEEE.

• **Abdullah, M.,** Khrais, J., & Swedat, S. (2022, June). Transformer-Based Deep Learning for Sarcasm Detection with Imbalanced Dataset: Resampling Techniques with Downsampling and Augmentation. In *2022 13th International Conference on Information and Communication Systems (ICICS)* (pp. 294-300). IEEE.

• **Abdullah, M**., Al-Ayyoub, M., AlRawashdeh, S., & Shatnawi, F. (2021). "E-learningDJUST: E-learning dataset from Jordan university of science and technology toward investigating the impact of COVID-19 pandemic on education". *Neural Computing and Applications*, 1-15

• Yaseen, Tuqa Bani, Qusai Ismail, Sarah Al-Omari, Eslam Al-Sobh, and **Malak Abdullah**. "JUST-BLUE at SemEval-2021 Task 1: Predicting Lexical Complexity using BERT and RoBERTa Pre-trained Language Models." In *Proceedings of the 15th International Workshop on Semantic Evaluation (SemEval-2021)*, pp. 661-666. 2021.

• Faraj, Dalya, and **Malak Abdullah**. "SarcasmDet at SemEval-2021 Task 7: Detect Humor and Offensive based on Demographic Factors using RoBERTa Pre-trained Model." In *Proceedings of the 15th International Workshop on Semantic Evaluation (SemEval-2021)*, pp. 527-533. 2021.

• Abujaber, Dia, Ahmed Qarqaz, and **Malak A. Abdullah**. "LeCun at SemEval-2021 Task 6: Detecting Persuasion Techniques in Text Using Ensembled Pretrained Transformers and Data Augmentation." In *Proceedings of the 15th International Workshop on Semantic Evaluation (SemEval-2021)*, pp. 1068-1074. 2021.

• Abedalla, Ayat, **Malak Abdullah**, Mahmoud Al-Ayyoub, and Elhadj Benkhelifa. "Chest X-ray pneumothorax segmentation using U-Net with EfficientNet and ResNet architectures." *PeerJ Computer Science* 7 (2021): e607.

• Qarqaz, Ahmed, Dia Abujaber, and **Malak Abdullah**. "R00 at NLP4IF-2021 fighting COVID-19 infodemic with transformers and more transformers." In *Proceedings of the Fourth Workshop on NLP for Internet Freedom: Censorship, Disinformation, and Propaganda*, pp. 104-109. 2021.

• Qarqaz, Ahmed, and **Malak A. Abdullah**. "Team R00 at Mowjaz Multi-Topic Labelling Task for Arabic Articles." In *2021 12th International Conference on Information and Communication Systems (ICICS)*, pp. 462-465. IEEE, 2021.

• Alharahsheh, Yara E., and **Malak A. Abdullah**. "Predicting Individuals Mental Health Status in Kenya using Machine Learning Methods." In *2021 12th International Conference on Information and Communication Systems (ICICS)*, pp. 94-98. IEEE, 2021.

• Shatnawi, Fara, **Malak Abdullah**, and Mahmoud Hammad. "MLEngineer at SemEval-2020 task 7: BERT-flair based humor detection model (BFHumor)." In *Proceedings of the Fourteenth Workshop on Semantic Evaluation*, pp. 1041-1048. 2020.

• Al-Khdour, Nour, Mutaz Bni Younes, **Malak Abdullah**, and AL-Smadi Mohammad. "JUSTMasters at SemEval-2020 Task 3: Multilingual deep learning model to predict the effect of context in word similarity." In *Proceedings of the Fourteenth Workshop on Semantic Evaluation*, pp. 292-300. 2020.

• Mohammed, Roweida, and **Malak Abdullah**. "Teamjust at semeval-2020 task 4: Commonsense validation and explanation using ensembling techniques." In *Proceedings of the Fourteenth Workshop on Semantic Evaluation*, pp. 594-600. 2020.

• Abedalla, Ayat, **Malak Abdullah**, Mahmoud Al-Ayyoub, and Elhadj Benkhelifa. "2st-unet: 2-stage training model using u-net for pneumothorax segmentation in chest x-rays." In *2020 International Joint Conference on Neural Networks (IJCNN)*, pp. 1-6. IEEE, 2020.

• Mohammed, Roweida, Jumanah Rawashdeh, and **Malak Abdullah**. "Machine learning with oversampling and undersampling techniques: overview study and experimental results." In *2020 11th international conference on information and communication systems (ICICS)*, pp. 243-248. IEEE, 2020.

• O ElTayeby, T Eaglin, **M Abdullah**, D Burlinson, W Dou, L Yao, "A feasibility study on identifying drinking-related contents in Facebook through mining heterogeneous data", Health informatics journal 25 (4), 1756-1767, 2019

• **Malak Abdullah,** Mirsad Hadzikadic, and Samira Shaikh. "SEDAT: Sentiment and Emotion Detection in Arabic Text using CNN-LSTM Deep Learning", Proceedings of the 17th IEEE International Conference on Machine Learning And Applications, 2018

• **Malak Abdullah,** and Samira Shaikh. "TeamUNCC at SemEval-2018 Task 1: Emotion Detection in English and Arabic Tweets using Deep Learning", Proceedings of the 12th International Workshop on Semantic Evaluation, 350-357, 2018

• **Malak Abdullah,** and Mirsad Hadzikadic. "Sentiment Analysis of Twitter Data: Emotions Revealed Regarding Donald Trump during the 2015-16 Primary Debates", Tools with Artificial Intelligence (ICTAI), 2017 IEEE 29th International Conference on. IEEE, 2017.

• **Malak Abdullah**, and Mirsad Hadzikadic. "Sentiment Analysis on Arabic Tweets: Challenges to Dissecting the Language." In International Conference on Social Computing and Social Media, pp. 191-202. Springer, Cham, 2017

• ElTayeby, Omar, Todd Eaglin, **Malak Abdullah**, David Burlinson, Wenwen Dou, and Lixia Yao. "Detecting Drinking-Related Contents on Social Media by Classifying Heterogeneous Data Types." In International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, pp. 364-373. Springer, Cham, 2017.

• **M. Abdullah**, E. Abuelrub, and B. Mahafzah, "The Chained-Cubic Tree: A New Interconnection Network", The International Arab Journal of Information Technology (IAJIT), vol. 8, no. 3, Jul. 2011.

LANGUAGES

Arabic: Native
English: Fluent

References available upon request.