

Faculty Vitae

Personal Information

Dr. Faisal S. AL-Saggar

Al al-Bayt University, Faculty of Information Technology Computer Science Department

Mafraq 25113,

Jordan

Tel: +962 (2) 6297000 ext. 3357 Email: faisalss@aabu.edu.jo

Education

| Degree | Discipline | Institution | Year |
|--------|------------------|----------------------------------------|------|
| PhD | Computer Science | Concordia University, Montreal, Canada | 2015 |
| M.Sc. | Computer Science | AL al-Bayt University- Jordan | 2001 |
| B.Sc. | Computer Science | Yarmouk University-Jordan | 1994 |
| | | | |

Academic Experience

| Rank | Institution | Title | Duration |
|---------------------|---------------------------------|--------------|-----------|
| Associate Professor | AL al-Bayt University- Jordan | Staff Member | 2021-Now |
| Assistant Professor | AL al-Bayt University- Jordan | Staff Member | 2016-2021 |
| Lecturer | AL al-Bayt University- Jordan | Staff Member | 2005-2010 |
| Lecturer | Philadelphia University, Jordan | Staff Member | 2001-2005 |

Non-academic Experience

- Lab Supervisor, Faculty of Science, Philadelphia University, Jordan. 1995-2001

Certification/ Professional Registration

- 32 Hour Graduate Seminar in University Teaching, Concordia University Canada, 2015.
- Al-Hussein Fund for Excellence Computer Science Follow-up Training Session, Amman Jordan, 2006.
- Promoting Excellence in Higher Education Programs, Amman Jordan, 2006.
- Introduction to ORACLE (RDBMS) ver.7, ORACLE Advanced Application Building, Microsoft C# Programming, Visual Basic Programming, FoxPro Programming.
- Computer Maintenance, Word Processing.



Current Membership in Professional Organizations

- Reviewer in Expert Systems with Applications, ELSEVEIR.
- Reviewer in Microprocessors and Microsystems, ELSEVEIR.
- Reviewer in International Journal of System Assurance Engineering and Management, Springer.
- Reviewer in Complex and Intelligent Systems, Springer.
- Reviewer in Transactions on Emerging Telecommunications Technologies (ETT), Wiley.

Honors and awards

- AL al-Bayt University- Jordan, PhD Scholarship, 2011-2015.
- GSSP, Concordia University, 2011-2013
- King Hussein Award, Certificate of Teaching Excellence, the Faculty of IT of Philadelphia University Ranked First in the British QA over Jordanian Universities, 2003.
- Ministry of Education Jordan, Bachelors Scholarship, 1990-1994.

Service Activities

- **Assistant Dean,** Deanship of Graduate Studies, Al al-Bayt University, 2019-2020.
- **Department Representative,** Prince Hussein Bin Abdullah College for Information Technology, Al al-Bayt University, 2017-2018.
- **Secretary Council**, Computer Science Department, Prince Hussein Bin Abdullah College for Information Technology, Al al-Bayt University, 2005- 2010, 2016-2018.
- **Quality Assurance Committee chair**, Prince Hussein Bin Abdullah College for Information Technology, Al al-Bayt University, 2006- 2010, 2016-Present.
- **Quality Assurance Committee**, Faculty of Information Technology, Philadelphia University, 2002-2003.
- **Practical Training Committee**, Faculty of Information Technology, Philadelphia University, 2001-2004.
- **Examination committee**, Faculty of Information Technology, Philadelphia University, 2001-2004.

Research Interest

- Intelligent Agents and Multi-Agent Systems
- Validation and Automatic Verification (Model Checking)
- Formal Methods
- Pattern Recognition



Knowledge Reasoning

Recent Publications

Journals:

- A. AL-Shatnawi, F. Al-Saqqar, ALIREZA SOURI, "Arabic Handwritten Word Recognition Based on Stationary Wavelet Transform Technique using Machine Learning", ACM Transactions on Asian and Low-Resources Language Information Processing, Vol.21, No. 3, 2021.
- o M. El-Bashir, F. Al-Saqqar, A. AL-Shatnawi and M. Nusir, "Face Recognition Model Based on Covariance Intersection Fusion for Interactive devices", World of Computer Science and Information Technology Journal (WCSIT), Vol. 12, No. 2, 2021.
- o A. AL-Shatnawi, **F. Al-Saqqar**, M. El-Bashir and M. Nusir "Face Recognition Model based on the Laplacian Pyramid Fusion Technique", International Journal of Advances in Soft Computing and its Applications, Vol. 13, No. 1, 2021.
- F. AL-Saqqar and A. AL-Shatnawi, "Reasoning about group social commitments in multi-agent systems", Journal of Ambient Intelligence and Humanized Computing, pp. 1-17, Springer, Sep. 2020, [ISI impact factor in 2019:4.594, 5-years: 3.348].
- o A. AL-Shatnawi, **F. Al-Saqqar** and S. Alhusban, "A Holistic Model for Recognition of Handwritten Arabic Text Based on the Local Binary Pattern Technique", International Journal of Interactive Mobile Technologies (iJIM), Vol. 14, Issue 16, 2020.
- A. AL-Shatnawi, F. Al-Saqqar, and H. Al-Smadi, "A hybrid Feature Selection Approach
 for Arabic Handwritten Text Based on Genetic Algorithm and Support Vector Machine",
 International Journal of Advanced Trends in Computer Science and Engineering (ijatcse),
 Vol. 9, Issue 1, pp. 813-819, 2020.
- F. AL-Saqqar, A. AL-Shatnawi, M. Al-Diabat and M. Aloun, "Handwritten Arabic Text Recognition using Principal Component Analysis and Support Vector Machines", International Journal of Advanced Computer Science and Applications, Vol. 10, Issue 12, pp. 1-6, 2019.
- o **F. Al-Saqqar**, J. Bentahar, K. Sultan, "On the Soundness, Completeness and Applicability of the Logic of Knowledge and Communicative Commitments in Multi-Agent Systems", Journal of Expert Systems with Applications, Vol. 43, pp. 223-236, Elsevier, 2016. [ISI impact factor in 2012: 1.854, 5-year 2.339].
- o **F. Al-Saqqar**, J. Bentahar, K. Sultan, W. Wan, and E. Khosrowshahi Asl. "Model checking temporal knowledge and commitments in multi-agent systems using reduction". Simulation Modelling Practice and Theory, Elsevier, 51:45 68, 2015. [TR impact factor in 2012: 1.159, 5-year: 1.188.
- o F. Al-Saqqar, J. Bentahar, K. Sultan, M. El-Menshawy, "On the Interaction between



Knowledge and Social Commitments in Multi-Agent Systems", Applied Intelligence Journal, Vol. 41, Issue 1, pp. 235-259, Springer, July 2014. [ISI impact factor in 2012: 1.85, 5-years 1.94].

- o K. Sultan, J. Bentahar, W. Wan, **F. Al-Saqqar**, "Modeling and Verifying Probabilistic Multi-Agent Systems using Knowledge and Social Commitments", Journal of Expert Systems with Applications, Elsevier, 2014. [ISI impact factor in 2012: 1.854, 5-year 2.339].
- o M. Al Rababaa, M. Al Kofahi, **F. Al-Saqqar**, S. A. Al Rababah, "Hash Algorithms for Security on GSM System", International review on computers and software journal 'IRECOS', Vol.4 N.6, Italy, November 2009.

• Conferences:

- W. El Kholy, M. El Menshawy, A. Laarej, J. Bentahar, F. Al-Saqqar and Rachida Dssouli, "Model Checking Real-Time Conditional Commitment Logic using Transformation Technique", PRIMA 2015: The18th International Conference on Principles and Practice of Multi-Agent Systems, Italy 2015.
- o **F. Al-Saqqar** and J. Atoum, "Detecting Parallelism in Rule-Based Programs Through Control Flow Analysis", ISIICT Second International Symposium on Innovation in Information & Communication Technology, Philadelphia University, Amman-Jordan, pp. 92-105, April 21-22, 2004.
- o **F. AL-Saqqar** and I. Ababneh, "A Performance Study of the PowerXplorer Parallel Computer", Proceeding of the international Conference on Recent Trends in Computer Science Application & Information Systems, Philadelphia University, Amman-Jordan, pp 193-199, 1999.



Training of Highly Qualified Personnel

| No. | Student Name | Thesis | Торіс | Status |
|-----|------------------------|--------|--------------------------------------------------------------------------------------------------------|-----------|
| 1. | Mohammad I. Nusir | M.Sc. | Face recognition using local binary pattern and principal component analysis | Completed |
| 2. | Hamza S. Al-Smadi | M.Sc. | Arabic Handwritten Text Recognition using Genetic Algorithms and Artificial Neural Networks | Completed |
| 3. | Mo'ath S. Ben Said | M.Sc. | Offline Signature Recognition using Stationary Wavelet and Local Binary Pattern | Completed |
| 4. | Qoutibah A. Al-Assi | M.Sc. | Recognition of Holy Quran Tajweed rules using Hidden Markov Model (HMM) | Completed |
| 5. | Murad A. Al-kashashneh | M.Sc. | Model Checking Knowledge and Commitment in Multi Agent Systems | Completed |
| 6. | Mohammed A. Alolaimat | M.Sc. | Offline Handwritten Signature Recognition using Wavelet Packet Decomposition (WPD) | Completed |
| 7. | Maher A. Alamaireh | M.Sc. | Offline Signature Recognition using Discrete Wavelet Transform (DWT) and Support Vector Machines (SVM) | Completed |
| 8. | Ahmad T. Al-khwaldeh | M.Sc. | Arabic Text Spam Emails Detection using Deep Learning | Completed |
| 9. | Esra'a A. Mashaqbeh | M.Sc. | Predicting Student Academic Performance using Gradient Boosting Algorithms | Completed |
| 10. | Ramzi J. Mosalam | M.Sc. | Improve Accuracy and Performance, ID Switched Using Logistic Regression for Deep Sort Algorithm | Completed |



| 11. | Esra'a A. Mashaqbeh | M.Sc. | Predicting Student Academic Performance using Gradient | In Progress |
|-----|----------------------|-------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 12. | Ramzi J. Mosalam | M.Sc. | Boosting Algorithms Improve Accuracy and Performance, ID Switched Using Logistic Regression for Deep Sort Algorithm | In Progress |
| 13. | Ahmad T. Al-khwaldeh | M.Sc. | Arabic Text Spam Emails Detection using Deep Learning | In Progress |

Classes Taught

- Advanced Artificial Intelligence, Artificial Intelligence, Prolog Language, Symbolic Programming.
- Computational Theory, Compilers.
- System Analysis and Design, Information System Design, Introduction to Information Systems.
- Digital Logic
- Special Topics (ORACLE).
- Programming in Java.
- Programming Fundamentals, Introduction to Programming and C++ Language, Advanced Programming using C++, Object Oriented Programming.
- Computer Skills I, Computer Skills II.