

## BASSAM H. HAMMO



Professor

King Abdullah II School for Information Technology  
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## EDUCATIONAL BACKGROUND

Ph.D. Computer Science, DePaul University, Chicago, IL	2002
Ms. Computer Science, Northeastern Illinois University, Chicago, IL	1993
Bs. Computer Science, Jordan University, Jordan	1987

## CAREER PROFILE

Track record of excellence in administration, research and teaching with over 20 years of teaching experience and ten years of multi-industrial experience. Senior Quality Assurance Engineer experienced in the successful development and release of many industrial products in the United States. Proven skills in software testing, development, analysis and documentation. Solid communication and interpersonal skills coupled with international experience and a multicultural background. Reliable, well organized, react positively to pressure, committed to quality work and superior jobs performance. Bi-lingual, Arabic and English.

## PROFESSIONAL EXPERIENCE

### A. Administration & Teaching Experience

University of Jordan, Amman Jordan (Full Professor) <b>Dean</b> of King Abdullah II School of Information Technology	Sept 2016-Sept 2018
Princess Sumaya University for Technology, Amman Jordan <b>(Sabbatical Leave)</b>	Sept 2014 – Sept 2015
University of Jordan, Amman Jordan <b>Deputy Dean</b> , <i>head of graduate studies committee</i>	Sept 2012 – May 2014
King Saud University, Riyadh SA ( <b>Unpaid Leave</b> ) <i>Associate Professor, head of graduate parallel program committee, member of ABET committee</i>	Sept 2010 – July 2012
University of Jordan, Amman Jordan <b>Chairman</b> of the Computer Information Systems Department	Sept 2008 – Sept 2010
University of Jordan, Amman Jordan <b>Assistant Dean for Computer Labs Affairs</b>	Sept 2004 – Sept 2006
University of Jordan, Amman Jordan <b>Assistant Professor</b>	Sept 2003
University of Robert Morris, Chicago, IL <b>Senior Computer Science Lecturer</b>	Nov 1997 – Aug 2003
DePaul University, Chicago, Illinois <b>Teaching Assistant, School of Computer Science</b>	Mar 1994 – Jun 1996

## B. Work Experience

Classified Ventures (Chicago Tribune), Chicago, IL, USA. <u>Sr. Quality Assurance Analyst, Apartments.com, Cars.com</u>	Oct 1998 – Dec 2001
CCC Information Services, Chicago, IL, USA. <u>Quality Assurance Analyst, Server Re-Engineering Group</u>	May 1997 – Sept 1998
CCH Inc. (Wolters Kluwer Business) Chicago, Illinois, USA. <u>Quality Assurance Analyst, Electronic Production Group</u>	Aug 1995 – May 1997
MCI Telecommunications, Chicago, Illinois, USA. <u>LAN Administrator, Internal Communication Group</u>	Nov 1994 – Jun 1995
Jordan Computer Center, Amman, Jordan <u>Software Developer</u>	Dec 1989 – Aug 1992

## TAUGHT COURSES

### A. Undergraduate Courses

Natural Language Processing  
Human Computer Interaction  
Database Management Systems  
Distributed Databases  
Object Oriented Programming Languages (Java)  
Software Engineering

### B. Graduate Courses

Advanced Topics in Natural Language Processing  
Advanced Topics in Databases

## SUPERVISION OF PHD & MASTER STUDENTS

No.	Year	Title
1.	2018	A Framework and Apparatus for Clustering Arabic Text Documents Based-On the Bond Energy Algorithm (PhD)
2.	2018	Exploring Non-Human Traffic in Online Digital Advertisements: Analysis and Prediction (PhD)
3.	2017	Extracting Information from Arabic-Based Controlled Text Domains Assisted by Description Logic (PhD)
4.	2017	Enhancing the Performance of Association Rule-Based Classifiers Applied on Selected Gold Standard Datasets (PhD)
5.	2018	The Design and Implementation of an Analytical System for Tracking Chronic Diseases in Jordan
7.	2017	Storyboard Creation Based on Text Extraction and Image Annotation
8.	2017	Towards an Improvement of Arabic Root Extraction Techniques
9.	2016	Classification of Beta Thalassemia Using Data Mining Techniques
10.	2016	Towards Building a Prophetic Ontology Based on Quran and Hadith
11.	2013	Towards Multithreaded Sliding Window to Improve Exact Pattern Matching Algorithms in Searching Text Documents
12.	2013	Internationalization of Weka: Towards a Multilingual Toolkit
13.	2013	The Design and Implementation of a Conversational Agent for Arabic Learning Environment
14.	2013	Improving Web Search Using Semantic Web Crawler
15.	2013	Designing and Developing XML-Based Semantic Concordance on Arabic Historical Principle Corpus
16.	2013	The Design and Implementation of an Arabic Question Answering System Based on the Universal Networking Language (UNL)
17.	2010	Investigating The Impact Of Using Latent Semantics In Bilingual (Arabic- English ) Text
18.	2010	Investigating The Syntactical Structure Of Arabic Sentences
19.	2010	Extracting N-gram Phrases from Tagged Arabic Corpus
20.	2010	An Investigation of Techniques to Optimize Spam Filtering
21.	2009	Investigating Text Categorization Techniques Using Arabic Corpus
22.	2009	Toward Developing Tools For Arabic Corpus
23.	2009	Extracting Emotional Expressions From Unstructured Text Based On Emotion-Ontology
24.	2009	Using Mutation Testing To Generate Test Cases For Exception Handling Coverage In SQL Database

25. 2008 Arabic Webpage Classification Based On Fuzzy Association
26. 2008 Knowledge Discovery In Al-Hadith Using Text Classification Algorithm
27. 2007 Experimenting With Automatic Summarization Of Arabic Text
28. 2007 Applying Text Mining Algorithms For Knowledge Discovery On The Holy Quran Text
29. 2006 Investigating Dual Domain Watermarking In HIS Color Model
30. 2006 Arabic Voice-Based Information Retrieval
31. 2006 A computer-Based System for Classifying Human Chromosomes and Detecting Early Deficiencies

## PUBLICATIONS

1. Jaber Alwidian, **Bassam Hammo** & Nadim Obeid (2017). WCBA: Weighted Classification Based on Association Rules Algorithm for Breast Cancer Disease, Applied Soft Computing. (In press).
2. Alia Al-Sayed Ahmad, **Bassam Hammo** & Sane Yagi (2017). English-Arabic Political Parallel Corpus: Construction, Analysis, and a Case Study in Translation Strategies, JJCIT. (In press).
3. Hanan Al-Sanasleh & **Bassam Hammo** (2017). Building Domain Ontology: Experiences in Developing the Prophetic Ontology from Quran and Hadith, Proc. of ICTCS, PSUT, Amman, Jordan.
4. Inas Abuqaddom & **Bassam Hammo** (2017). A Survey of Data Replication Techniques for MANET Databases, Proc. of 2nd-IT-DREPS, MEU, Amman, Jordan.
5. Qasem Mais Haj, Qaddoura Raneem, **Hammo Bassam** (2017). Educational Data Mining (EDM): A Review. In Proc. of New Trends in Information Technology, the University of Jordan, Amman, Jordan.
6. Fasha Mohammad, Obeid Nadim, **Hammo Bassam** (2017). A Proposed Model for Extracting Information from Arabic-Based Controlled Text Domains. In Proc. of New Trends in Information Technology, the University of Jordan, Amman, Jordan.
7. Ahmad, Alia Al-Sayed, **Hammo, Bassam**, Yagi, Sane (2017). Construction of an English-Arabic Political Parallel Corpus. In Proc. of New Trends in Information Technology, 149, the University of Jordan, Amman, Jordan.
8. **Hammo, Bassam**, Yagi, Sane, Ismail, Omaima and AbuShariah, Mohammad (2016). Exploring and exploiting a historical corpus for Arabic. Language Resources and Evaluation, 50, 4, 839-861, Springer Netherlands.
9. Varouqa, Marwa & **Hammo, Bassam** (2016). WIT: Weka interface translator. International Journal of Speech Technology, 19, 2, 359-371, Springer US.
10. **Hammo, Bassam**, Obeid, Nadim, Huzayyen, Israa (2016). ViStA: a visualization system for exploring Arabic text. International Journal of Speech Technology, 19, 2, 237-247, Springer US.
11. **Hammo, Bassam**, Evens, Martha, Abu-Salem, Hani (2016). Effects of the College Major on Assessments of Arabic Text Summaries. International Arab Journal of Information Technology (IAJIT), 13, 3, Zarqa Private University.
12. Jaber Alwidian, Nadim Obeid, **Bassam Hammo** (2016). Enhanced CBA algorithm Based on Apriori Optimization and Statistical Ranking Measure. The 28<sup>th</sup> IBIMA, Innovation Management, Development Sustainability, and Competitive Economic Growth, Seville, Spain.
13. Nadim Obeid; Israa Huzayyen; **Bassam Hammo** (2013). "Experimenting with Arabic text visualizing", *Communications, Signal Processing, and their Applications (ICCSPA)*, 1-6, IEEE.
14. Al-Husain Dalal; **Hammo Bassam** (2012). "The Role of Mobile Technology and Social Media in Mobile Learning: A Literature Review", Proceedings of the 2012 *International Conference on E-Learning, E-Business, Enterprise Information Systems, & E-Government*, pp. 204-211, WORLD COMP'12.
15. **Hammo B.**, Sleit A. and Baarah A. (2012). "A Computational Approach for Identifying Quranic Themes", *International Journal of Computer Processing of Languages (IJCPOL)*, 24(2), 189-206. World Scientific Publishing Company.
16. **Hammo B.**, AbuSalem, H. and Evens M. (2011). "A Hybrid Arabic Text Summarization Technique Based on Text Structure and Topic Identification". *International Journal of Computer Processing of Languages*, 23 (01), 39-65. World Scientific Publishing Company.
17. **Hammo B.** and Saraireh, B. (2010). "Integrating ICT in Education: Impact on Teachers' Beliefs and Practices". Chapter in a Book: ICT Acceptance, Investment in the Arab World". *IGI Global Publisher*.
18. Nino, D., Abdallah, M.; & **Hammo, B.** (2009). "Separable watermarking technique using the biological color model". *Journal of Computer Science*, 5 (8): 579-588.
19. Bassam H Hammo (2009). "Towards enhancing retrieval effectiveness of search engines for diacritized Arabic documents", *Information Retrieval*, 12(3), 300-323, Springer, Netherlands.
20. Al- Zoubi, M.B.; Hudaib, A.; Huneiti, A.; & **Hammo, B** (2008). "New Efficient Strategy to Accelerate k-Means Clustering Algorithm". *American Journal of Applied Sciences*, 5(9), 1247-1250.
21. El-Haj, M.; & **Hammo, B.** (2008). "Evaluation of Query-Based Arabic Text Summarization System". In *Proceedings of the IEEE International Conference on Natural Language Processing and Knowledge Engineering (IEEE NLP-KE08)*, Beijing, China, pp.102-109.
22. **Hammo, B.**; Sleit, A.; & El-Haj, M. (2008). "Enhancing Retrieval Effectiveness of Diacritized Arabic Passages Using Stemmer and Thesaurus". In the *Proceedings of the 19th Midwest Artificial Intelligence and Cognitive Science Conference (MAICS 2008)*, Cincinnati, OH, USA, pp. 189-196.
23. **Hammo, B.**; Hudaib, A.; & Saraireh, B. (2008). "Lessons Learned from Training Teachers on ICT: A Case Study from the University of Jordan". In the *Proceedings of the first International Conference on Technology, Communication and Education (i-TCE)*, Kuwait, pp.
24. **Hammo, B.** (2007). "Beyond Traditional Lecturing: Interactive Computer-Based Classroom". In the *Proceedings of 4th*

- International MIT LINC Conference*, Amman, Jordan & Dubai, U.A.E. pp. 297-305.
25. **Hammo, B.;** & Hudaib, A. (2007). "Shifting the Gears: Towards Automatic Assessment of Undergraduate Students at the University of Jordan". In the *Proceedings of 4th International MIT LINC Conference*, Amman, Jordan & Dubai, U.A.E. pp. 306-313.
  26. **Hammo, B.;** Hudaib, A.; Huneiti, A., & Al-Zoubi, M.B. (2007). "Preparing Jordanian Teachers to Face the Challenges in Applying Information and Communication Technology in Education". In the *Proceedings of 4th International MIT LINC Conference*, Amman, Jordan & Dubai, U.A.E. pp. 288-296.
  27. Hudaib, A.; **Hammo, B.;** & Alkhader, Y. (2007). "Systematic Development for Software Requirements using Natural Language Processing Techniques". *Journal of WSEAS TRANSACTIONS on COMPUTER RESEARCH*, 2(2), 255-261.
  28. **Hammo, B.;** Qutaishat, M.; & Bsaiso, M. (2007). "Towards Extracting XML Data Using A Template Schema". In the *Proceedings of the 7th Dutch-Belgian Information Retrieval Workshop (DIR 2007)*, Leuven, Belgium, pp. 75-82.
  29. Hudaib, A.; **Hammo, B.;** & Alkhader, Y. (2007). "Towards Software Requirements Extraction Using Natural Language Approach", In the *Proceedings of the 6th WSEAS International Conference on Software Engineering, Parallel and Distributed Systems*, Corfu Island, Greece, pp. 155-160.
  30. Nino, D; Abdallah, M; & **Hammo. B.** (2006). "Dual domain watermarking in the biological color model", In the *Proceedings of 2nd International Conference on Information and Automation (ICIA 2006)*, Colombo SRI LANKA, pp. 407-411.
  31. Alkhader, Y; Hudaib, A; & **Hammo, B.** (2006). "Experimenting with extracting software requirements using NLP approach", In the *Proceedings of 2nd International Conference on Information and Automation (ICIA 2006)*, Colombo SRI LANKA, pp. 349-354.
  32. Hudaib, A.; & **Hammo, B.** (2006). "Towards Convenience Online Classified Ads". In the *Proceedings of the 4th International Multi-conference on Computer Science and Information Technology (CSIT '06)*, No. 3, Amman, Jordan, pp. 257-263.
  33. **Hammo, B.;** Abuleil, S.; Lytinen, S.; & Evens, M. (2004). "Experimenting with a question answering system for the Arabic language". *Journal of Computers and Humanities* 38(4), 379-415.
  34. Alsamara, K.; Abu-Salem, H.; Abuleil, S.; & **Hammo, B.** (2003). "Building Automated Indexes to Improve Arabic Information Retrieval". In the *Proceedings of 2003 International Conference on Management Science & Engineering*, Atlanta, GA, USA , pp. 2573-2578.
  35. **Hammo B.;** & Lytintn, S. (2002). "A Question Answering System for Arabic". In the *Proceedings of DePaul CTI Research Symposium (CTIRS'02)*, Chicago, IL, pp. 3-14.
  36. **Hammo, B.;** & Abu-Salem, H. (2002). "Open-Domain Question Answering for Arabic". In the *Proceedings of the International Arab Conference on Information Technology ACIT' 2002*, University of Qatar, Doha, pp. 356-363.
  37. **Hammo, B.;** Abu-Salem, H.; Lytinen, S.; & Evens, M. (2002). "QARAB: A Question Answering System to Support the Arabic Language". In the *Proceedings of the Workshop on Computational Approaches to Semitic Languages ACL 2002*, Philadelphia, PA,USA, pp. 55-65.
  38. **Hammo, B.;** Abu-Salem, H.; Lytinen, S.; & Abuleil, S. (2002). "Identifying Proper Nouns for an Arabic Question Answering System". In the *Proceedings of the 13<sup>th</sup> Midwest Artificial Intelligence and Cognitive Science Conference MAICS 2002*, Chicago, IL, USA, pp. 130-136.