## **BASSAM H. HAMMO**



King Abdullah II School for Information Technology Dean Computer Information Systems Department The University of Jordan Amman, Jordan b.hammo@ju.edu.jo bassam.hammo@gmail.com

**Professor** 

### **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 research and teaching with over 15 years of teaching experience and ten years of multi-industrial experience. An accomplished 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

PROFESSIONAL EXPERIENCE			
A. Administration & Teaching Experience			
University of Jordan, Amman Jordan, Professor Dean of KASIT	Sept 2016 – Current		
Princess Sumaya University for Technology, Amman Jordan <u>Visiting Professor</u>	Sept 2014 – Sept 2015		
University of Jordan, Amman Jordan <u>Deputy Dean,</u> head of graduate studies committee	Sept 2012 – May 2014		
King Saud University, Riyadh SA Associate Professor, head of graduate parallel program committee, member of ABET committee	Sept 2010 – July 2012		
University of Jordan, Amman Jordan Chairman of the Computer Information Systems Department	Sept 2008 – Sept 2010		
University of Jordan, Amman Jordan <u>Dean Assistant for Computer Labs Affairs</u>	Sept 2004 – Sept 2006		
University of Robert Morris, Chicago, IL Senior Computer Science Lecturer	Nov 1997 – Aug 2003		
DePaul University, Chicago, Illinois Teaching Assistant, School of Computer Science	Mar 1994 – Jun 1996		

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В	. Work Experience	
	lassified Ventures (Chicago Tribune), Chicago, IL, USA. r. Quality Assurance Analyst, Appartments.com, Cars.com	Oct 1998 – Dec 2001
	CC Information Services, Chicago, IL, USA. uality Assurance Analyst, Server Re-Engineering Group	May 1997 – Sept 1998
	CH Inc. (Wolters Kluwer Business) Chicago, Illinois, USA. uality Assurance Analyst, Electronic Production Group	Aug 1995 – May 1997
	CI Telecommunications, Chicago, Illinois, USA.  AN Administrator, Internal Communication Group	Nov 1994 – Jun 1995

# **TEACHING**

Dec 1989 - Aug 1992

# A. Undergraduate Courses

Software Developer

Jordan Computer Center, Amman, Jordan

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

## **B.** Graduate Courses

Advanced Topics in Natural Language Processing Advanced Topics in Databases Advanced Topics in Machine Learning

## **SUPERVISION OF MASTER STUDENTS**

No.	Year	Title
1.	2013	Towards Multithreaded Sliding Window to Improve Exact Pattern Matching Algorithms in Searching Text Documents
2.	2013	Internationalization of Weka: Towards a Multilingual Toolkit
3.	2013	The Design and Implementation of a Conversational Agent for Arabic Learning Environment
4.	2013	Improving Web Search Using Semantic Web Crawler
5.	2013	Designing and Developing XML-Based Semantic Concordance on Arabic Historical Principle Corpus
6.	2013	The Design and Implementation of an Arabic Question Answering System Based on the Universal Networking Language (UNL)
7.	2010	Investigating The Impact Of Using Latent Semantics In Bilingual (Arabic- English ) Text
8.	2010	Investigating The Syntactical Structure Of Arabic Sentences
9.	2010	Extracting N-gram Phrases from Tagged Arabic Corpus
10.	2010	An Investigation of Techniques to Optimize Spam Filtering
11.	2009	Investigating Text Categorization Techniques Using Arabic Corpus
12.	2009	Toward Developing Tools For Arabic Corpus
13.	2009	Extracting Emotional Expressions From Unstructured Text Based On Emotion-Ontology
14.	2009	Using Mutation Testing To Generate Test Cases For Exception Handling Coverage In SQL Database
15.	2008	Arabic Webpage Classification Based On Fuzzy Association
16.	2008	Knowledge Discovery In Al-Hadith Using Text Classification Algorithm
17.	2007	Experimenting With Automatic Summarization Of Arabic Text
18.	2007	Applying Text Mining Algorithms For Knowledge Discovery On The Holy Quran Text

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- 19. 2006 Investigating Dual Domain Watermarking In HIS Color Model
- 20. 2006 Arabic Voice-Based Information Retrieval
- 21. 2006 A computer-Based System for Classifying Human Chromosomes and Detecting Early Deficiencies

### **PUBLICATIONS**

 Hammo, Bassam; Yagi, Sane; Ismail, Omaima; AbuShariah, Mohammad (2016). "Exploring and exploiting a historical corpus for Arabic", accepted for publication in *Language Resources and Evaluations*, 49(3). To appear in September 2016. Springer Netherlands.

- 2. **Hammo, Bassam**; Obeid, Nadim; Huzayyen, Israa (2016). "ViStA: a visualization system for exploring Arabic text", *International Journal of Speech Technology*, 19(2), 237-247.
- 3. **Bassam Hammo**; Martha Evens; and Hani Abu-Salem (2016). "Effects of the College Major on Assessments of Arabic Text Summaries", *IAJIT*, 13(3), 264-271.
- 4. Varouqa, Marwa; **Hammo, Bassam** (2016). "WIT: Weka Interface Translator", *International Journal of Speech Technology*, 19(2), 359-371.
- 5. Omaima Ismail; Sane Yagi; **Bassam Hammo** (2015). "Corpus Linguistic Tools for Historical Semantics in Arabic", accepted for publication in the *International Journal of Arabic-English Studies* (IJAES), Vol. 15, 2015.
- 6. Al-Husain Dalal; **Hammo Bassam** (2015). "Investigating the Readiness of College Students for ICT and Mobile Learning: A Case Study from King Saud University", *IAJET*, 4(1), 48-55.
- Moubaiddin Asma; Ola Shalbak; Hammo Bassam; Obeid Nadim (2015). "Arabic Dialogue System for Hotel Reservation Using Text-Based Natural Language Processing", Computation and Systems (CyS) 19(1), 119-134.
- 8. **Hammo Bassam**; Moubaiddin Asma; Obeid Nadim; Tuffaha Abeer (2014). "Formal Description of Arabic Syntactic Structure in the Framework of the Government and Binding Theory", *Computation and Systems* (CyS) 18(3), 611-625.
- 9. **Bassam Hammo**; Faisal AL-Shargi; Sane Yagi; Nadim Obeid (2013). "Developing tools for Arabic corpus for researchers", *Second Workshop on Arabic Corpus Linguistics* (WACL-2, 2013, "Lancaster University, UK.
- 10. Moubaiddin Asma; Tuffaha Abeer; **Hammo Bassam**; Obeid, Nadim (2013). "Investigating the syntactic structure of Arabic sentences", *Communications, Signal Processing, and their Applications* (ICCSPA), 1-6, 2013,IEEE.
- 11. Nadim Obeid; Israa Huzayyen; **Bassam Hammo** (2013). "Experimenting with Arabic text visualizing", *Communications, Signal Processing, and their Applications* (ICCSPA), 1-6, 2013,IEEE.
- 12. 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, WORLDCOMP'12.
- 13. **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.
- 14. **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.
- 15. **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*.
- 16. Nino, D., Abdallah, M.; & **Hammo**, **B**. (2009). "Separable watermarking technique using the biological color model". *Journal of Computer Science*, 5 (8): 579-588.
- 17. Bassam H Hammo (2009). "Towards enhancing retrieval effectiveness of search engines for diacritisized Arabic documents", *Information Retrieval*, 12(3), 300-323, Springer, Netherlands.
- 18. 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.
- 19. 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.
- 20. **Hammo, B.**; Sleit, A.; & El-Haj, M. 2008. "Enhancing Retrieval Effectiveness of Diacritisized 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.
- 21. **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.
- 22. **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.
- 23. **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.
- 24. 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.

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25. 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.

- 26. **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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. **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.
- 32. 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.
- 33. **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.
- 34. **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.
- 35. **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.
- 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.