

Curriculum Vitae

PERSONAL RECORD

NAME: Dr. Abdelsalam M. MAATUK AGE: 46
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ACADEMIC RECORD

2006 - 2009 **PhD. Computer Science**, School of Computing, Engineering and Information Sciences, University of Northumbria, UK.
2002 - 2004 **MSc. Computing (with Commendation)**, School of Computing, Engineering and Information Sciences, University of Northumbria, UK.
1990 - 1994 **BSc. Computer Science**, Department of Computer Science, Faculty of Sciences, University of Benghazi, Libya.

SUCCESSFUL COMPLETION OF TRAINING COURSES

01/2002 to 12/2009 Intensive academic courses and computing training sessions, Northumbria and Newcastle Universities.
07/2010 to 12/2010 Professional Development Presentation Stage I, National ICT Project for Capacity Building, Project between GPCHE, Libya, and UNISCO.
13 to 14/08/2016 A workshop on Teaching and Learning. Libyan International Medical University.
15 to 17/08/2016 A workshop on Problem-based Learning. Libyan International Medical University.

AWARDS

- ◆ Scholarship from Omar Al Mukhtar University, Libya for studying Academic English Language at the UK universities (Jan 2002- August 2002).
- ◆ Scholarship from Omar Al Mukhtar University, Libya for studying MSc. at Northumbria University, UK (Sep 2002- June 2004).
- ◆ Scholarship from Omar Al Mukhtar University, Libya for studying PhD. at Northumbria University, UK (Jan 2006-Dec 2009).

SUMMARY OF WORKING EXPERIENCE

- ◆ November 2016 to Date: Associate Professor in Computing, Faculty of Information Technology, Information Systems Department, Benghazi University, Libya.
- ◆ August 2016 to Date: Head of Information Technology Department, The Libyan Academy for Post-Graduate Studies.
- ◆ April 2016 to December 2016: Member of the Quality Assurance and Performance Evaluation Committee, Faculty of Information Technology, University of Benghazi.
- ◆ January 2016 to Date: Assistant Professor in the Department of Information Technology, The Libyan Academy for Post-Graduate Studies.
- ◆ November 2015 to December 2016: Chairman of the Post-Graduate Studies Committee, Faculty of Information Technology, University of Benghazi.

Curriculum Vitae

- ◆ September 2015 to Date: Assistant Professor in the Faculty of Information Technology, Libyan International Medical University.
- ◆ July 2015 to December 2016: Vice Dean of Information Technology Faculty, University of Benghazi.
- ◆ June 2015 to Date: Member of the Committee on the Administration of the Faculty Members, the University of Benghazi.
- ◆ September 2014 to October 2016: Assistant Professor in Computing, Faculty of Information Technology, Information Systems Department, Benghazi University, Libya.
- ◆ November 2012 to August 2014: Assistant Professor in Computing, Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ May 2012 to August 2014: Chairman of the Committee charged with preparing a proposal to the credit hour system, Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ April 2012 to August 2014: Chairman of the Committee charged with preparing the rules, regulations and discipline, Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ February 2012 to April 2014: Head of Computer Sciences Department, Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ December 2009 to August 2014: Non-resident Lecturer (collaborator) to teach some courses in computer science. Omar Al-Mukhtar University, University of Benghazi, the Higher Institute of overall professions (Derna, El-Baida)
- ◆ December 2009 to October 2012: Lecturer in Computing, Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ January 2006 to September 2009, Member of the Intelligent Modeling Group (IML), Northumbria University, UK.
- ◆ September 1999 to December 2001: Student Demonstrator in different BSc. degree courses in Omar Al Mukhtar University, Libya.
- ◆ September 1996 to July 1998: Mathematics Teacher, Secondary School, Libya.

SOFTWARE DEVELOPMENT EXPERIENCE

- ◆ Designed and developed several systems during my BSc and MSc studies.
Role: Designer and Developer, **Development Tools/Environment:** FoxPro, Visual Basic, Java, Oracle 8i/9i/10g.
- ◆ Designed and developed a system called *MIGROX* as a research product of my PhD.
Role: Designer and Developer, **Development Tools/Environment:** Java, Oracle 11g.

COMPUTING SKILLS

OPERATING SYSTEM/ENVIRONMENT

- ◆ MS-Windows 9x/2000/NT/XP/Vista
- ◆ UNIX /Linux

PROGRAMMING LANGUAGES

- ◆ C/C++
- ◆ Java
- ◆ Perl
- ◆ Visual Basic
- ◆ Pascal
- ◆ XML

DATABASE PROGRAMMING LANGUAGES/DEVELOPMENT KITS

Curriculum Vitae

- ◆ Oracle SQL+
- ◆ Oracle PL/SQL
- ◆ ODL/OQL

DBMS (Relational, Object-Oriented, Object-Relational, XML)

- ◆ Oracle 8i/9i /10g/11g
- ◆ MySQL
- ◆ XMLSpay
- ◆ Lambda-DB
- ◆ MS-Access
- ◆ MS-SQL Server 2008

MODELLING/PRESENTATION/WORD PROCESSING

- ◆ UML
- ◆ PowerPoint
- ◆ Word
- ◆ LaTeX
- ◆ Visio

CURRENT ACTIVITIES & RESEARCH and EXPERIENCE

Research

Database Integration, Database Migration, Database Reverse Engineering, Software Engineering, Cloud Computing, E-Learning

Teaching

Teaching modules/courses at BSc. and MSc. levels, e.g., Database Modeling, Advanced Databases, Relational Databases, Object-Oriented Analysis and Design using UML, Software and Data Modeling, Information System Modeling, Data Mining, etc.

Curriculum Development

Developed various modules/courses for teaching on BSc. and MSc. programs in computing/computer sciences at Benghazi and Omar Al Mukhtar Universities, Libya.

Supervision and Examination

Successfully supervised and examined MSc and BSc individual research and development projects.

Editorial, Reviewer, Participation and Scientific Committees

- ◆ ITU-ALECSO International Forum on “The Use of Cloud Computing Technology for Education in Arab Countries” Tunis, Tunisia, 5 & 6 October 2016.
- ◆ IEEE International Conference on Engineering & MIS. 22-24 September 2016, Agadir, Morocco.
- ◆ A workshop on promoting the performance level of the educational process at the Faculty of Information Technology, University of Benghazi, 4, 5 & 6 April 2016.
- ◆ Guest Editor of Special Issue in Journal of Universal Computer Science on Advanced Research on Software Security Design and Applications, April, 2016.
- ◆ ACM International Conference on Engineering & MIS. 23-26 September 2015, Istanbul, Turkey.
- ◆ ACIT'2013, The International Arab Conference on Information Technology, Sudan University of Science and Technology, Sudan, December 17-19, 2013
- ◆ ACM International Conference on Intelligent Semantic Web-Services and Applications (ISWSA), Jordan, 2011.
- ◆ Libyan Journal of Basic Science. Faculty of Sciences, Omar Al Mukhtar University, Libya.
- ◆ International Conference on Systems, Computing Sciences and Software Engineering (SCSS), Bridgeport, USA, 2008.

PUBLICATIONS

- [1] Shadi Aljawarneh, Mohammed R. Elkobaisi and Abdelsalam M. Maatuk: A new agent approach for recognizing research trends in wearable systems. In *Computers and Electrical Engineering*, 2016.
- [2] Shadi Aljawarneh, Reem Jaradat, Abdelsalam M. Maatuk and Abdullah Alhaj: Gene Profile Classification: A Proposed Solution for Predicting Possible Diseases and Initial Results. In *Proceedings of IEEE International Conference on Engineering & MIS (ICEMIS)*, Agadir, Morocco, 2016, pp. 1-7. doi: 10.1109/ICEMIS.2016.7745342
- [3] Shadi A Aljawarneh, Federica Cena and Abdelsalam M. Maatuk. Advanced Research on Software Security Design and Applications J. UCS Special Issue. In *Journal of Universal Computer Science*, vol 22(4), pp. 453-458. 2016
- [4] Raja A. Moftah, Abdelsalam M. Maatuk and Richard White. Methods to Access Structured and Semi-Structured Data in Bioinformatics Databases: A Perspective. In *Proceedings of IEEE International Conference on Engineering & MIS (ICEMIS)*, Agadir, Morocco, 2016, pp. 1-5. doi: 10.1109/ICEMIS.2016.7745313
- [5] Ebitisam K. Elberkawi, Naser .F. M. EL-firjani, Abdelsalam M. Maatuk and Shadi Aljawarneh. Usability Evaluation of Web-based Systems: A New Method and Results. In *Proceedings of International Conference on Software Engineering and Knowledge Discovery (ICSEKD'16)*. 2016
- [6] Abdelsalam M. Maatuk, M. Akhtar Ali, Raja A. Moftah and Mohammed R. Elkobaisi. Performance Evaluation of an RDB and an ORDB: A Comparative Study using the BUCKY Benchmark. In *Proceedings of IEEE International Conference on Engineering & MIS*. 2016.
- [7] Naser F. Mohamed EL-firjani and Abdelsalam M. Maatuk. Mobile Augmented Reality for Interactive Catalogue. In *Workshop of Innovative Applications on Modern Devices (IAMD 2016) - the Key Factor of Effective Education and Edutainment*. 2016.
- [8] Moh'd Ishaq Abu Halawa, Abdelsalam M. Maatuk, Heba Saleh Idrees and Eman Husen Ali. An Optimal Solution for Transportation Problem Using Computing Modelling. In *IEEE International Conference on Internet of Things and Pervasive Systems (IoT-SP-2016)*. 22-24 September 2016, Agadir, Morocco
- [9] Shadi A. Aljawarneh, Raja A. Moftah and Abdelsalam M. Maatuk. Investigations of automatic methods for detecting the polymorphic worms signatures. In *Future Generation Computer Systems*. Vol. 60 (2016) 67-77.
- [10] Tawfig M. Abdelaziz, Abdelsalam M. Maatuk and Fatma Rajab. An Approach to Improvement the Usability in Software Products. In *International Journal of Software Engineering & Applications (IJSEA)*, Vol.7, No.2, March 2016. DOI : 10.5121/ijsea.2016.7202 11
- [11] Abdalmunam S. Abdalla, Mehmet Koyuturk, Abdelsalam M. Maatuk and Alfaroq O. Mohammed: Using Graphs to Visualize Overlapping Sets. In *International Journal of Computer Science and Information Security (IJCSIS)*, Special issue on "Computing Applications and Data Mining". Vol. 14 S1, pages 10, February 2016.
- [12] Abdelsalam M. Maatuk, M. Akhtar Ali, Shadi Aljawarneh and Mohammed Elkobaisi: Migrating Relational Databases into XML Documents. In *MAGNT RESEARCH REPORT, BRIS Journal of Advances in Science and Technology*, pages 14, 2016 (In Press).
- [13] Raja A. Moftah, Abdelsalam M. Maatuk, Peter Plasmann and Shadi Aljawarneh: An Overview about the Polymorphic Worms Signatures. In *Proceedings of ACM International Conference on Engineering & MIS (ICEMIS '15)*. ACM, New York, NY, USA, Article 29, 4 pages. DOI=<http://dx.doi.org/10.1145/2832987.2833031>

- [14] Negin Keivani, Abdelsalam M. Maatuk, Shadi Aljawarneh and M. Akhtar. Towards the Maturity of Object-Relational Database Technology: Promises and Reality. *The International Journal of Technology Diffusion (IJTD)*, vol. 6(4) , pp. 1-19, 2015. doi:10.4018/IJTD.2015100101
- [15] Mohammed R. Elkobaisi, Abdelsalam M. Maatuk and Shadi Aljawarneh. A Proposed Method to Recognize the Research Trends using Web-based Search Engines. In *Proceedings of ACM International Conference on Engineering & MIS*, (ICEMIS '15). ACM, New York, NY, USA, Article 15, 4 pages. DOI=http://dx.doi.org/10.1145/2832987.2833012
- [16] Abdalmonam S. Abdalla, Mehmet Koyuturk, Abdelsalam M. Maatuk and Alfarooq O. Mohammed. Sets Visualization using their Graph Representation. In *Proceedings of ACM International Conference on Engineering & MIS* (ICEMIS '15). ACM, New York, NY, USA, Article 23, 6 pages. DOI=http://dx.doi.org/10.1145/2832987.2833023
- [17] Alfarooq O. Mohammed, Ziad A. Abdelnabi, Abdelsalam M. Maatuk and Abdalmonam S. Abdalla. An Experimental Study on Detecting Semantic Defects in Object-Oriented Programs using Software Reading Techniques. In *Proceedings of ACM International Conference on Engineering & MIS* (ICEMIS '15), ACM, New York, NY, USA, Article 24, 6 pages. DOI=http://dx.doi.org/10.1145/2832987.2833025
- [18] Abdelsalam M. Maatuk, M. Akhtar Ali and Shadi Aljawarneh: Translating Relational Database Schemas into Object-based Schemas: University Case Study. In *Recent Patents on Computer Science . Innovations in Educational Technology and E-learning Social Networking*. Vol. 8, No 2, pages 122-132, December, 2015. DOI: [10.2174/2213275908666150710174102](https://doi.org/10.2174/2213275908666150710174102).
- [19] Abdelsalam M. Maatuk, M. Akhtar Ali and Shadi Aljawarneh: An algorithm for constructing XML Schema documents from relational databases. In *Proceeding of ACM International Conference on Engineering & MIS* (ICEMIS '15). ACM, New York, NY, USA, Article 12, 6 pages. DOI=http://dx.doi.org/10.1145/2832987.2833007
- [20] Mohammed Abdellah, Abdelsalam M. Maatuk and Abdelhamid Mohammed: Security Organizations and the Technology of E-Government A Preliminary Study Applied to the Justice and Interior Ministries in Libya, In *Proceedings of the 13th International Arab Conference on Information Technology - ACIT'2012*, organized by CCIS, Zarqa University, Jordon, 6 pages, 2013.
- [21] Shadi Aljawarneh, Abdelsalam Maatuk and Akhtar Ali: Security Issues in Cloud Computing: A Perspective, In *the Proceedings of the 9th International Conference on Electronics, Computer and Computation (ICECCO'12)*, Ankara, Turkey, 1st November 2012.
- [22] Shadi Aljawarneh, Thamer Al-Rousan and Abdelsalam M. Maatuk. Security Issues Influencing the Usage of Online Banking in the Arab World: Data Validation, *Security Journal (ISI Thomson)*, pages 10, doi:10.1057/sj.2012.10 (2012).
- [23] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. Re-Engineering Relational Database: The Way Forward. In *Proceedings of the 2nd International Conference on Intelligent Semantic Web-Services and Applications*, ISWSA 2011, Jordan, ACM, pages 18 (2011).
- [24] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. Semantic Enrichment: The First Phase of Relational Database Migration. Tarek Sobh (ed). In *Innovations and Advances in Computer Sciences and Engineering*, Springer Netherlands, pages 373-378, USA (2010). DOI: 10.1007/978-90-481-3658-2_65.
- [25] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. Converting Relational Databases into Object-relational Databases. *Journal of Object Technology (JOT)*, vol. 9(2), pages 145-161 (2010).
- [26] Abdelsalam Maatuk, *Migrating Relational Databases into Object-based and XML Databases*. PhD Thesis, University of Northumbria, Newcastle, UK, September 2009.

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- [27] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. Semantic Enrichment: The First Phase of Relational Database Migration. In *Proceedings of the 2008 International Conference on Systems, Computing Sciences and Software Engineering (SCSS), Bridgeport, USA*, pages 373-378 (2008).
- [28] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. Relational Database Migration: A Perspective. In *DEXA 2008, Italy. Lecture Notes in Computer Science*, 5181, pages. 676-683, (2008).
- [29] Abdelsalam Maatuk, M. Akhtar Ali and Nick Rossiter. An Integrated Approach to Relational Database Migration. In *the Proceeding of International Conference on Information and Communication Technologies-2008 (IC-ICT '08)*, Bannu, N.W.F.P, Pakistan, pages 01-06 (2008).
- [30] Abdelsalam Maatuk. Investigation into the Techniques for Converting Relational Databases into Object-Oriented and Object-Relational Databases. MSc Thesis, University of Northumbria, Newcastle, UK, September 2004.

RESEARCH & DEVELOPMENT INTERESTS

- ◆ Database Re-Engineering/Migration
- ◆ Data Mining/Modeling
- ◆ Object-based/XML Databases
- ◆ Object-Oriented Analysis and Design

REFERENCES

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