



Education

- 2012- 2015: **Ph.D.**, Software Engineering, Universiti Malaysia Sarawak, Malaysia
2010 –2012: **M.Sc.**, Computer Science, Philadelphia University, Jordan
1993 –1997: **B.Sc.**, Computer Science, Yarmouk University, Jordan

Experience Summary: (+6) Teaching, (+4) Research, and (+12) Industrial

- Oct 015-Present: Assistant Professor, The World Islamic Sciences and Education, Amman, Jordan
2012- 2015 : Teaching Assistant, Universiti Malaysia Sarawak, Malaysia
2010 –2012 : Teacher, Ministry of Education, Jordan
2005 –2010 : Project Manager, Abu Dhabi and Dubai Gov., UAE
1999-2004 : Senior System Analyst & Web Developer, Abu Dhabi, UAE
1997 –1999 : Teacher, Ministry of Education and a teaching center, Jordan



Honors and Awards

- Feb 2013 : Universiti Malaysia Sarawak Zamalah Scholarship
May 2012 : Grant of Ministry of Education Malaysia
Mar 2010 : Information Technology Infrastructure Library Foundation ITIL® v3, ITILF V3
Mar 2010 : ISO/IEC 20000 Foundation, EXIN, ISO 20000
June 2008 : Project Management Professional, PMI, PMP® No.:533164
Jan 2004 : Oracle® Certified Professional.

Research Interests

- Sentiment Analysis.
- Semantic Similarity.
- Software Quality.
- Software Engineering.

Teaching Experience (+6 years)

Oct. 2015- Present

Assistant Professor, The World Islamic Sciences and Education, Amman, Jordan.

Subjects Taught

Introduction to Software Engineering, Software Modeling, Web Development Using JSP, Visual Programming Using Java, Building Internet Application Using HTML.

Roles and Responsibilities:

- Develop and implement innovative instructional methods.
- Guide, lead and mentor students in research projects.
- Evaluate, monitor and mentor student academic progress.
- Participate in departmental and college activities.
- Serve and support functional activities of departmental committees.
- Assess, review and evaluate student activities and progress.

Sep 2012- May2015

Teaching Assistant, Universiti Malaysia Sarawak, Malaysia.

Subjects Taught

Introduction to programming with C, Database Concepts and Design.

Roles and Responsibilities:

- Provide support to students on an individual, class or small group basis.
- Improve student's study skills that assist them in preparation for graduate education.
- Provide and maintain an atmosphere conducive to learning and retaining the material studied.
- Inform the Academic Advisor of any academic or disciplinary problems.
- Demonstrate a commitment, through mentoring, to assist social-economically disadvantaged students.
- Develop motivational skills necessary for success at the University.
- Maintain accurate and timely records of student contact and maintain confidentiality.
- Utilize the resources of the university to the fullest extent possible to benefit students' skills.

2010 –2012, 1998 –1999

Teacher, Ministry of Education, Jordan

June 1997 – Sep 1998

Teacher, North Computer Teaching Center, Jordan.

Subjects taught: Programming languages (VB, C, basic,...), MS Windows and Office.

Roles and Responsibilities:

- Prepare lesson plans and teach various classes.
- Encourage students in their studies and evaluate their work and progress.
- Supervise student behavior and maintain classroom discipline.
- Demonstrate good citizenship and respect for all groups of people.

June 1997 – Sep 1998

Teacher, North Computer Teaching Center, Jordan.

Subjects taught: Programming in VB and Basic, Management Information Systems, MS Windows and Office

Research Experience (+4 years)

2012 – June 2015

Ph.D., Computer Science, Universiti Malaysia Sarawak (UNIMAS), Malaysia.

Thesis Title: A Computational Framework for Predicting Software Quality-in-use from Software Reviews.

- Proposed a novel *quality-in-use* framework to calculate the overall software *quality-in-use* according to the ISO 25010 specification.
- Prepared a knowledge base for software *quality-in-use* measurement.
- Proposed a novel word and sentence similarity measures known as Joint Weighted Word Similarity Measure (JWWS) and Weighted Sentence Similarity Measure (WSSM).
- Proposed an approach to predict software *quality-in-use* topics using WSSM as an embedded component within the *quality-in-use* Framework.

2010 –2012

Master, Computer Science, Philadelphia University, Jordan.

Thesis Title: A Holistic Cyber Security Strategy Implementation Framework.

- Proposed a Holistic Cyber Security Strategy Implementation Framework (CSS-IF).
- Proposed a holistic Performance Framework as an embedded component within the CSS-IF using a modified version of Information Technology Security Balanced Score Card (ITsec-BSC)
- A proposed Requirements Elicitation approach based on viewpoint concept.
- Conceptually and practically proved the CSS-IF framework.

Publications

• Journals:

1. **Atoum**, I., & Bong, C. H. (2015). Measuring Software Quality in Use: State-of-the-Art and Research Challenges. *ASQ. Software Quality Professional*, 17(2), 4–15.
2. **Atoum**, I., Bong, C. H., & Kulathuramaiyer, N. (2014). Towards Resolving Software Quality-in-Use Measurement Challenges. *Journal of Emerging Trends in Computing and Information Sciences*, 5(11), 877–885.
3. **Atoum**, I., Ootom, A. A., & Abu Ali, A. (2012). A Holistic Cyber Security Implementation Framework. *International Journal of Information Security*, 22(3), 251–264. doi:10.1108/IMCS-02-2013-0014
4. Ootom, A., & **Atoum**, I. (2013). An Implementation Framework (IF) for the National Information Assurance and Cyber Security Strategy (NIACSS) of Jordan. *The International Arab Journal of Information Technology*, 10(4).
5. **Atoum**, I., Bong, C. H., & Kulathuramaiyer, N. (2015). Efficient Hybrid Semantic Text Similarity Using WordNet and a Corpus. *Computer Speech and Language (Elsevier)* [Under Review].
6. **Atoum**, I., Bong, C. H., & Kulathuramaiyer, N. (2016). A Comprehensive Comparative Study of Word and Sentence Similarity Measures. *International Journal of Computer Applications*. [accepted]

• Conferences:

7. **Atoum**, I., & Bong, C. H. (2014). A Framework to Predict Software “Quality in Use” from Software Reviews. In J. Herawan, Tutut and Deris, Mustafa Mat and Abawajy (Ed.), *Proceedings of the First International Conference on Advanced Data and Information Engineering (DaEng-2013)* (Vol. 285, pp. 429–436). Kuala Lumpur: Springer Singapore. doi:10.1007/978-981-4585-18-7_48
8. **Atoum**, I., Bong, C. H., & Kulathuramaiyer, N. (2015). Building a Pilot Software Quality-in-Use Benchmark Dataset. In *9th International Conference on IT in Asia*. Kuching, Malaysia: IEEE.
9. Wendy, S. T. W., How, B. C., & **Atoum**, I. (2014). Using Latent Semantic Analysis to Identify Quality in Use (QU) Indicators from User Reviews. In *The International Conference on Artificial Intelligence and Pattern Recognition (AIPR2014)* (pp. 143–151). Asia Pacific University of Technology & Innovation (APU), Kuala Lumpur, Malaysia ResearchGate.

• Book Chapters:

10. **Atoum**, I., & Bong, C. H. (2013). Joint Distance and Information Content Word Similarity Measure. In S. Noah, A. Abdullah, H. Arshad, A. Abu Bakar, Z. Othman, S. Sahran, ... Z. Othman (Eds.), *Soft Computing Applications and Intelligent Systems SE - 22* (Vol. 378, pp. 257–267). Kuala Lumpur: Springer Berlin Heidelberg. doi:10.1007/978-3-642-40567-9_22

Conducted Workshops

Jan 2013 conducted a workshop for University of Malaya at Universiti Malaysia Sarawak, Malaysia
Workshop title: Towards Understanding Probabilistic Topic Models (Latent Dirichlet Allocation)

- The objective of topic modeling.
- Statistical background of topic models.
- Topic models variants (PLSA, LDA, SDLA, ...).
- Applications and practical examples.
- Relationship to text classification.

Industrial Experience (+12 years)

Jan 2005 – July 2010

Nov 2008 – July 2010

Position: **Assistant Project Manager**, Dubai Customs, Dubai, U.A.E

Jan 2005 – Nov 2007

Position: **Technical Project Manager**, GENERAL MAINTENANCE CORPS, Abu Dhabi, U.A.E

Roles and Responsibilities (Jan 2005 – July 2010)

- Manage project development from beginning to end.
- Define project goals, scope, and deliverables with project team and stakeholders.
- Develop project plans and support product documentation.
- Estimate resources and participants needed in order to achieve project goals.
- Project budgeting and recommend new changes when needed.
- Determine and assess resource requirements and make the appropriate recruitments if necessary during project life cycle.
- Manage project expectations with the whole project team.
- Identify and resolve issues and conflicts within the project team.
- Manage requirements and proposals (RFP/RFI/RFQ).
- Develop and deliver Status reports, Kickoff meetings, Steering Committees, and presentations.
- Schedule project timelines and milestones using MS project, HP PPM and EPMS.
- Manage changes proactively in project scope, timelines, identify potential risks /issues, and develop contingency plans.
- Manage project acceptance and closing process using best practices and PMBOK® guide methodologies.

June 1997- Dec2004

September 1999- December 2004

Position: **Senior System Analyst & Web Developer**, GENERAL MAINTENANCE CORPS, Abu Dhabi, U.A.E

June 1997- September 1999

Position: **Programmer & Analyst**, NCS, Jordan

Roles and Responsibilities (1999-2004):

- Feasibility study and implementation of proposed changes.
- Prepare detailed flow charts and diagrams outlining systems capabilities and processes.
- Work with application development lifecycle methodologies, such as the SDLC or CMMI, in addition to business requirement translation to systems. Analyze and evaluate present or proposed business procedures or problems to meet business needs and compliance requirements.
- Communicate complex systems issues and solutions to teams.
- Writing and maintaining all system documentation, code libraries and creating help and user manual documents for end users.
- Work as a team member with other technical staff.

Programmer Analyst (1997-1999)

- Developing code and implement solutions using Oracle tools.
- Unit testing, system integration testing and user acceptance testing.
- Requirement gathering and analyzing.
- Flowcharts and system diagrams.

Industrial Certifications

1. Mar 2010 Information Technology Infrastructure Library Foundation **ITIL® v3**, ITILF V3
2. Mar 2010 **ISO/IEC 20000** Foundation, EXIN, ISO 20000
3. June 2008 Project Management Professional, PMI, **PMP®** No.:533164
4. ISO 9001 Brainbench Certificates, transcript ID is 4959692
 - April 2005 **VBSscript 5.5**
 - March 2005 **XML**
 - March 2005 **ASP.NET**
 - March 2005 **HTML 3.2**
 - Feb 2005 **Visual Basic.NET**
5. Jan 2004 Oracle 9i forms: Oracle Certified Professional (**OCP**)

Industrial Training

1. 7th October 2015
PHP Workshop, Pioneers Academy, Amman, Jordan
2. 04-06 April 2010
Creative Problem Solving and Decision Making, Global Union Training and Consulting, Dubai, UAE
3. 10-12 March 2009
Presentation and Communication Skills, Sofitel Hotel by Focus Middle East, Dubai, U.A.E
4. 2nd February 2009
ICC Master Class, Crown Plaza Hotel by Informatica, Dubai, U.A.E
5. 10-12 February 2009
Customs Overview, Sofitel Hotel by Dubai Customs, Dubai, U.A.E
6. Feb - April 2008
Project Management Body of Knowledge-2004, Chicago, Abu Dhabi, U.A.E
7. Oct 2005 (5 Day Course)
Developing MAXIMO 5 Reports with Actuate Professional, MDS, Abu Dhabi, U.A.E
8. April - May 2005
Implementing and Managing Microsoft Exchange Server, New Horizons, Abu Dhabi, U.A.E
9. March - April 2005
Administrating a Microsoft SQL Server 2000 Database 2072A, New Horizons, Abu Dhabi, U.A.E
10. April – May 2004
Java Programming Language (SL-275).
11. Sep - Nov 2002
Specialized Training Courses (**Developer 6i**) at New Horizons, Abu Dhabi, U.A.E

References

- Prof. Dr. Narayanan Kulathuramaiyer, Faculty of Computer Science and Information Technology, Universiti Malaysia Sarawak, Malaysia, e-mail nara@fit.unimas.my
- Prof. Dr. Said Ghoul, Faculty of Information Technology, Philadelphia University, Jordan, e-mail: sghoul@philadelphia.edu.jo.
- Associate Professor Amer Abu Ali, Faculty of Computing and Information Technology, Northern Borders University, Rafhaa, Kingdom of Saudi Arabia. Email drabuali@yahoo.com