Resume

Bio Data

Name	:	**Omar Shatnawi**
Designation	:	**Professor**
Nationality	:	**Jordanian**
Date of Birth	:	**December 04, 1974**
Mobile	:	**+962 77 7314568**
E-mail	:	**dromali@aabu.edu.jo**

Employment History

- **Professor: Jun. 2017—present, Computer Science Department, Al al-Bayt University, Jordan.**
- **Associate Professor: The academic year 2013, Computer Science Department, Najran University, Saudi Arabia.**
- **Associate Professor: Aug. 2011—Jun. 2017, Computer Science Department, Al al-Bayt University, Jordan.**
- **Assistant Professor: Feb. 2007—Aug. 2011, Computer Science Department, Al al-Bayt University, Jordan.**
- **Full-Time Lecturer: The academic year 2005, Computer Science Department, Al al-Bayt University, Jordan.**
- **Assistant Professor: The academic year 2004, Software Engineering Department, Al-Isra University, Jordan.**

Administrative Experience

- **Deputy Dean, Aug. 2015— Aug. 2020, Prince Hussein bin Abdullah College for 'IT', Al al-Bayt University, Jordan.**
- **Assistant Dean for Student Affairs and Quality, Academic Year 2017, Prince Hussein bin Abdullah College for 'IT', Al al-Bayt University, Jordan.**
- **Acting Head, Academic Year 2015, Computer Science Department, Al al-Bayt University, Jordan.**
- **Acting Head, Academic Year 2007, Information Systems Department, Al al-Bayt University, Jordan.**

Research Area

- **Software Reliability Engineering**
- **Soft Computing / Optimization Problems / Mathematical Modelling In Software Reliability**
- **Software Testing-Effort Control and Release-Time Problem**

Academic Qualifications

- **Ph.D. in Computer Science, 2004, Delhi University, India.**

Awards and Certificates

- **An award conferred by Al al-Bayt University for Outstanding Research Achievements and for Influencing the University's Rankings.**
- **An award conferred by the Editors of Software: Practice and Experience (Wiley, March 2022) in recognition of the review made for the Journal.**
- **An award conferred by the Society for Reliability Engineering, Quality, and Business Operations Management at the 7th ICQRIT'2015 for Promising Contributions in Software Reliability Engineering.**
- **An award conferred by the Editors of Reliability Engineering and System Safety (Elsevier, Sept. 2015) in recognition of the review made for the Journal.**
- **Certified course (Computer Applications, Software Engineering, and Software Reliability Engineering), 2002, Department of Computer Science, Faculty of Mathematical Sciences, Delhi University, India.**
- **Certified course (Management Information and Decision Support Systems, and Theory of Reliability), 2000, Department of Operational Research, Faculty of Mathematical Sciences, Delhi University, India.**

Courses Taught

- **Undergraduate Courses: (SE343/CS341: Software Engineering), (SE465: Software Verification and Validation), (SE348: Software Projects Management), (CIS352: Modeling and Simulation for Business), (CS351: Human-Computer Interaction), (CIS430: Information Systems Design), (CIS351: Information Systems Project Management), (CS331: Database Management Systems), (CIS351: Operational Research for Business), (CIS320: Computer Networks for Business), (CS200: Discrete Mathematics), (CS332: Operating Systems), (CS210: Object-Oriented Programming), (CIS490/MIS490: Graduation Project), (CSS440: Social, Ethical and Professional Issues), (CSS474: Design and Analysis of Algorithms), (CS420: Internetworking and Its Applications).**
- **Postgraduate Courses: (CS741: Advanced Software Engineering), (CS740: Object Oriented Software Development), (CS780: Advanced Computer Architecture), (CS720: Advanced Computer Networks), (CIS705: 'IT' In Education).**
- **Blended Learning for Syrian Refugees – AABU Certificate Program: (IT102: Fundamental of Information Technology), (IT103: Professional Skills and Ethics).**

Reviewer

- **Scientific Research Support Fund, Jordan.**
- **IEEE Transactions on Software Reliability (The *Institute of Electrical and Electronics Engineers*), USA.**
- **IEEE Software (The *Institute of Electrical and Electronics Engineers*), USA.**
- **IEE / IET Software (The *Institution of Engineering and Technology*), UK.**
- **IJCSSE (*Computer Systems Science and Engineering*), UK.**
- **International Journal of Systems Assurance Engineering and Management, *Springer*, India.**
- **SREQOM (*Society for Reliability Engineering, Quality, and Operations Management*), India.**
- **ISI / JIITO (*Informing Science Institute*), USA.**
- **ARISER Journal *(Arab Research Institute for Science and Engineering),* Lebanon.**
- **International Journal of Software Engineering, Egypt.**
- **IISE Transactions: Industrial Engineering Research and Development, *Taylor & Francis*, USA.**

Reviewer (cont.)

- International Journal of Reliability and Safety, *Inderscience*, UK.
- Computers and Mathematics with Applications, *Elsevier*, UK.
- The Scientific World Journal, *Hindawi*, USA.
- IAENG (*International Association of Engineers*) International Journal of Computer Science, Hong Kong.
- Journal of Computer Science, *Science Publication*, USA.
- *Irbid Journal for Research and Studies*- Irbid National University, Jordan.
- Reliability Engineering and System Safety, *Elsevier*, UK.
- International Journal of Mathematics in Operational Research, *Inderscience*, UK.
- Software: Practice and Experience, *Wiley*, USA.

Professional Society Memberships

- SREQOM (*Society for Reliability Engineering, Quality, and Operations Management*)
- IAENG (*Society of Software Engineering / International Association of Engineers*)
- ARISE (*Arab Research Institute for Science and Engineering*)
- WAYS (*World Association of Young Scientists*)

Journal Issues Edited

- Guest Editor, *International Journal of Systems Assurance Engineering and Management* (Springer), Special issue on "Reliability and Optimization." June 2014.

Editorial Board / Associate

- International Journal of Systems Assurance Engineering and Management, Springer.

Participation in International Conferences Committees

- Int'l Advisory Committee: *The 9th Int'l Conference on Quality, Reliability, INFOCOM Technology and Business Operations* 2018, Delhi University: Delhi, India.
- Int'l Advisory Committee: *Joint Int'l Conference on Interdisciplinary Research and Int'l Conference on Quality, Reliability, Infocom Technology and Business Operations* 2017, Amity University: Greater Noida - UP, India.
- Int'l Advisory Committee: *The 7th Int'l Conference on Quality, Reliability, INFOCOM Technology and Business Operations* 2015, Delhi University: Delhi, India.
- Technical Committee: *The Int'l INBUSH ERA Conference on Futuristic Trends in Computational Analysis and Knowledge Management* 2015, Amity University: Delhi, India.
- Scientific Programme Committee: *The 5th Int'l DQM Conference on Life Cycle Engineering and Management* 2014, Serbia.
- Scientific Programme Committee: *The 4th Int'l DQM Conference on Life Cycle Engineering and Management* 2013, Serbia.
- Int'l Advisory Committee: *The 6th Int'l Conference on Quality, Reliability, INFOCOM Technology and Technology Management* 2012, Delhi University: Delhi, India.
- Int'l Advisory Committee: *The 4th Int'l Conference on Quality, Reliability, and INFOCOM Technology* 2009, Delhi University: Delhi, India.
- Int'l Scientific Committee: *The 13th Int'l Conference on Systems* 2009, World Scientific and Engineering Academy and Society, Greece.
- Int'l Program Committee: *Int'l Conference on Software Engineering Research and Practice* 2007, World Academy of Science, USA.
- Int'l Advisory Committee: *The 3rd Int'l Conference on Quality, Reliability, and INFOCOM Technology* 2006, Indian National Science Academy: New Delhi, India.
- Program and Organizing Committee: *Int'l Conference on Software Engineering Research and Practice* 2006, World Academy of Science, USA.
- Program and Organizing Committee: *The 2nd Int'l Conference on Quality, Reliability, and Information Technology* 2003, Indian National Science Academy: New Delhi, India.

Participation in International Scientific Events

- *10th Int'l Conference on Information Technology 2021, Jordan.*
- *Joint Int'l Conference on Interdisciplinary Research 2017, India.*
- *7th Int'l Conference on Quality, Reliability, INFOCOM Technology and Business operations 2015, India.*
- *6th Int'l Conference on Quality, Reliability, INFOCOM Technology and Technology Management 2012, India.*
- *Int'l Conference on Interactive Mobile and Computer Aided Learning 2012, Jordan.*
- *10th Int'l Conference on Software Engineering 2011, Austria.*
- *5th Jordan National Tempus Conference 2009, Jordan.*
- *4th Int'l Conference on Quality, Reliability and INFOCOM Technology 2009, India.*
- *1st Int'l Conference on Computational and Information Science 2009, USA.*
- *12th WSEAS Int'l Conference on Computers 2008, Greece.*
- *1st Notre Dame Univ. Conference on Current Trends in the Applications of Computer Science 2008, Lebanon.*
- *JUNet – Microsoft Academic Innovation Day 2007, Jordan.*
- *13th Jordan Science Week: Science and Technology Parks-Building a Knowledge Based Economy 2007, Jordan.*
- *3rd Int'l Conference on Quality, Reliability and INFOCOM Technology 2006, India.*
- *Int'l Conference on Software Engineering Research and Practice 2006, USA.*
- *Int'l Conference on Software Engineering Research and Practice 2005, USA.*
- *1st Jordan Int'l Conference on Computer Sciences and Engineering 2004, Jordan.*
- *18th IFIP World Computer Congress 2004, France.*
- *2nd Int'l Conference on Quality, Reliability, and IT 2003, India.*
- *6th Int'l Conference of the Association of Asia Pacific Operational Research Societies within IFORS 2003, India.*
- *Int'l Conference on Multimedia and Design 2002, India.*
- *Int'l Conference on Quality, Reliability, and Control 2001, India.*

Publications

Refereed Journals

- "An Integrated Framework for Developing Continuous-Time Modelling in Software Reliability Engineering," (Communicated)
- "Discrete Time-Space Stochastic Mathematical Modeling for Quantitative Description of Software Imperfect Fault-Debugging with Change-Point," *International Journal of Advanced Computer Science and Applications*, 2021, Vol. 12, No. 6, pp. 804−811.
- "Modelling Software Reliability Growth Phenomenon In Distributed Development Environment," *International Journal of Scientific and Technology Research*, 2019, Vol. 8, No. 12, pp. 2176−2184.
- "An Integrated Framework for Developing Discrete-Time Modelling in Software Reliability Engineering," *Quality and Reliability Engineering International*, 2016, Vol. 32, No. 8, pp. 2925−2943.
- "Release Policy, Change-Point Concept, and Effort Control through Discrete-Time Imperfect Software Reliability Modelling," *International Journal of Computer Applications*, 2016, Vol. 137, No. 11, pp. 17−25.
- "Measuring Commercial Software Operational Reliability: An Interdisciplinary Modelling Approach," Eksploatacja i Niezawodność - *Maintenance and Reliability*, 2014, Vol. 16, No. 4, pp. 585−594.
- "Release Time Determination Depending on Number of Test Runs using Multi-Attribute Utility Theory," *International Journal of Systems Assurance Engineering and Management*, 2014, Vol. 5, No. 2, pp. 186−194.
- "Testing-Effort Dependent Software Reliability Model for Distributed Systems," *International Journal of Distributed Systems and Technologies*, 2013, Vol. 4, No. 2, pp. 1−14.
- "On the Development of Unified Scheme for Discrete Software Reliability Growth Modeling," *International Journal of Reliability, Quality and Safety Engineering*, 2010, Vol. 17, No. 3, pp. 245−260.
- "Discrete Time Modelling In Software Reliability Engineering: A Unified Approach," *International Journal of Computer Systems Science and Engineering*, 2009, Vol. 24, No. 6, pp. 391−398.
- "Unified Framework for Developing Testing Effort Dependent Software Reliability Growth Models," *WSEAS Transactions on Systems*, 2009, Vol. 8, No. 4, pp. 521−531.
- "Discrete Time NHPP Models for Software Reliability Growth Phenomenon," *International Arab Journal of Information Technology*, 2009, Vol. 6, No. 2, pp. 124−131.
- "A Generalized Software Fault Classification Model," *WSEAS Transactions on Computers*, 2008, Vol. 7, No. 9, pp. 1375−1384.
- "Modelling Software Fault Dependency Using Lag Function," *Al-Manarah Journal for Research and Studies*, 2008, Vol. 14, No. 3, pp. 73−87.
- "A Software Reliability Model for Distributed Systems," *Al-Manarah Journal for Research and Studies*, 2007, Vol. 13, No. 6, pp. 201−214.
- "A Discrete NHPP Model for Software Reliability Growth with Imperfect Fault Debugging and Fault Generation," *International Journal of Performability Engineering*, 2006, Vol. 2, No. 4, pp. 321−334.
- "Testing-Effort Control Problem using Flexible Software Reliability Growth Model with Change-Point," *International Journal of Performability Engineering*, 2006, Vol. 2, No. 3, pp. 245−262.
- "Why Software Reliability Growth Modelling should Define Errors of Different Severity," *Quality Control and Applied Statistics*, 2004, Vol. 49, No. 6, pp. 699−702.
- "A Software Fault Classification Model," *South African Computer Journal*, 2004, Vol. 33, pp. 1−9.

Conference Proceedings

- "An Integrated Analytical Approach to Mathematical Modelling the Stochastic Behaviour of Software Debugging Phenomenon," In: *Proceedings of 10th International Conference on Information Technology* (ICIT'2021), Al Zaytoonah University of Jordan, Jordan.
- "Modelling Software Fault Debugging Complexity under Imperfect Debugging Environment," In: *Proceedings of the 16th Int'l Arab Conference on Information Technology* (ACIT'2015), Isra Private University, Jordan.
- "Modelling Software Fault Debugging Complexity," In: *Proceedings of the 7th Int'l Conference on Quality, Reliability, INFOCOM Technology and Business Operations* (ICQRIT'2015), University of Delhi, India.
- "The Pham Nordmann Zhang (PNZ) Software Reliability Model Revisited," In: *Proceedings of the 10th IASTED Int'l Conference on Software Engineering* (SE'2011), Innsbruck, Austria, pp. 205−211.
- "Mathematical Modelling in Software Reliability," In: *Proceedings of the Int'l Conference on Computational and Information Science* (CIS'2009), University of Houston, USA, pp. 425−430.
- "A Generalized Software Fault Classification Model," In: *Proceedings of the 8th Conference on Systems Theory and Scientific Computation* (ISTASC'2008), Rhodes, Greece, pp. 129−197.
- "Discrete Time Modelling In Software Reliability," In: *Proceedings of the Int'l Conference on Software Engineering Research and Practice* (SERP'2005), Las Vegas, Nevada, USA, pp. 161−169.
- "Measuring Software-Operational Reliability," In: *Proceedings of the 18th IFIP World Computer Congress* (WCC'2004), Toulouse, France, pp. 165−176.
- "Software Testing-Effort Control and Release Time Problem," In: *Proceedings of the Int'l Conference of the Association of Asia-Pacific OR Societies within IFORS* (APROS'2004), pp. 247−256.
- "A Discrete Time Software Fault Classification Model," In: *Proceedings of the 2nd Int'l Conference on Quality, Reliability and 'IT'* (ICQRIT'2003), New Delhi, India, pp. 411−421.
- "Mathematical Modelling In Software Reliability and Marketing," In: *Proceedings of the Int'l Conference on Quality, Reliability and 'IT'* (ICQRIT'2003), New Delhi, India, pp. 231−246.
- "General Framework for Modelling Software Reliability during Testing and Operational Use," In: *Proceedings of the Int'l Conference on Quality, Reliability and 'IT'* (ICQRIT'2003), New Delhi, India, pp. 187−198.

Books

- **Modelling In Software Reliability, LAP Lambert Academic Publishing *GmbH & Co. KG*, 2016, Germany.**