

Shehnila Zardari

Curriculum Vitae

NED University of Engineering & Technology
Department of Computer Science & Software Engineering
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General Profile

A researcher specialised in software engineering, requirements engineering, risk management, and economic driven software engineering, with a penchant for teaching and research. Have ten years teaching and research experience. Strong interpersonal & communication skills with experience of making presentations and communicating complex information to individuals and groups.

Education

- 2016 **PhD, Computer Science**, *University of Birmingham*, United Kingdom.
Supervisor Dr. Rami Bahsoon
Thesis *Cloud Adoption: A Goal-Oriented Requirements Engineering Approach*
- 2006–2008 **M.E, Communication Systems and Networks**, *Mehran University of Engineering and Technology*, Pakistan.
- 2002–2006 **B.E, Software Engineering**, *Mehran University of Engineering and Technology*, Pakistan.

Publications

Articles in Peer-reviewed International Journals

- 1 **Shehnila Zardari**, M. Ajmal Sawand, Najeed A. Khan. Dealing with Cloud Adoption Risks: a Goal-Oriented Requirements Negotiation Approach. *International Journal of Computer Science and Information Security* Vol. 14 (9), pp. 884-887, ISSN: 1947-5500. **ISI indexed. SCI Impact Factor (0.519)**
- 2 **Shehnila Zardari**, Mohsin Ali Memon, Najeed A. Khan. Systematic Analysis of Risks in Cloud Architecture. *International Journal of Computer Science and Information Security* Vol. 14 (11), ISSN: 1947-5500. **ISI indexed. SCI Impact Factor (0.519)**
- 3 Najeed A. Khan, **Shehnila Zardari**, Shabeen Khan, Sehrish Saeed. A Method for Tumour Detection on Brain MRI Image by implementing SVM. *International Journal of Computer Science and Information Security* Vol. 14 (8), ISSN: 1947-5500. **ISI indexed. SCI Impact Factor (0.519)**

- 4 Sunny Katyara, Madad Ali Shah, **Shehnila Zardari**, Bhawani Shankar Chowdhry, Wanod Kumar. WSN Based Smart Control and Remote Field Monitoring of Pakistan's Irrigation System Using SCADA Applications. *Wireless Personal Communications*. Springer. ISSN: 0929-6212. **ISI indexed. JCR listed. Impact Factor (0.701)**
- 5 M. Ajmal Sawand, Najeed A. Khan, **Shehnila Zardari**. Combining Weak DFAs to Build Strong Hypothesis Using AdaBoost Classification Algorithm. *International Journal of Computer Science and Information Security* Vol. 14 (9), pp. 894-899. ISSN: 1947-5500. **ISI indexed. SCI Impact Factor (0.519)**
- 6 Najeed A. Khan, Saman Ali, **Shehnila Zardari**, Yusra Adnan, Sehrish Saeed, Saba Hassan Shamim. Unsupervised Cancer Detection using Computer Vision Techniques. *International Journal of Computer Science and Information Security* Vol. 14 (10), pp. 724-732. ISSN: 1947-5500. **ISI indexed. SCI Impact Factor (0.519)**
- 7 Syeda Uzma Gardazi, **Shehnila Zardari**. Realizing Compliance Tactics to Support Authentication: Bridging Gap Between Software Architecture and Regulatory Requirements. *International Journal of Computer Science and Network Security* Vol. 17 (6), ISSN: 1738-7906. **ISI indexed.**
- 8 Najeed A. Khan, **Shehnila Zardari**, Asif Ahmed Shaikh, Masood Rafi, Sana Shaukat. Computer Vision Based Displacement Measurement of Shake Table. *International Journal of Computer Science and Network Security* Vol. 17 (5), ISSN: 1738-7906. **ISI indexed.**
- 9 Asif Ali Laghari, Hui He, **Shehnila Zardari**, Muhammad Shafiq. Systematic Analysis of Quality of Experience (QoE) Frameworks for Multimedia Services. *International Journal of Computer Science and Network Security* Vol. 17 (6), ISSN: 1738-7906. **ISI indexed.**

Articles in Peer-reviewed National Journals

- 10 Zeeshan Bhatti, Imadad Ali Ismaili, **Shehnila Zardari**, Waseem Javaid Soomro, Abdul Waheed Mahesar. Design and Development of Unicode based Sindhi language Thesaurus. *Sindh University Research Journal (Science Series)*, Vol. 48 (4). ISSN: 1813-1743 **ISI indexed. HEC Recognized "X" Category Journal**
- 11 Rahat Ali Khan, Shahzad Memon, **Shehnila Zardari**, Lachman Das Dhomeja, Muhammad Usman. Transposition Technique for Minimization of Path Loss in Wireless On-Body Medical Sensors. *Sindh University Research Journal (Science Series)*, Vol. 48 (4). ISSN: 1813-1743. **ISI indexed. HEC Recognized "X" Category Journal**
- 12 Zahoor Hussain, Shahzad Memon, **Shehnila Zardari**, Raza Hussain Shah, Zulfiqar Ali Bhutto. Systematic Analysis of Smart Meter Technologies and Their Implementation Challenges in Pakistan. *Science International*, Vol. 28 (4), pp.113-120. ISSN:1013-5316. **ISI indexed. HEC Recognized "Y" Category Journal**
- 13 Ayesha Amir Siddiqi, Ghous Baksh Narejo, **Shehnila Zardari**, Mashal Tariq, Shehla Andleeb. Application of Image Processing Algorithms for Brain Tumor Analysis in 2D and 3D Leading to Tumor's Positioning in Skull: Overview. *Mehran University Research Journal of Engineering & Technology*, Vol. 36 (1). ISSN: 0254-7821. **HEC Recognized "X" Category Journal.**

- 14 Ghaus Baksh Narejo, Fawad Azeem, **Shehnila Zardari**. An Energy Policy Analysis and Proposed Remedial Actions to Reduce Energy Crises in Pakistan. *Mehran University Research Journal of Engineering & Technology*, Vol. 36 (2), ISSN: 0254-7821. **HEC Recognized "X" Category Journal.**
- 15 Saba Feroz Memon, Mohsin Ali Memon, **Shehnila Zardari**. "Blind's Eye: Employing Google Directions API for Outdoor Navigation of Visually Impaired Pedestrians. *Mehran University Research Journal of Engineering & Technology*, Vol. 36 (3). ISSN: 0254-7821. **HEC Recognized "X" Category Journal.**
- 16 Zeeshan Bhatti, Imdad Ali Ismaili, **Shehnila Zardari**, Hafiz Abid Mahmood Malik, Mostafa Karbasi. Procedural Animation of 3D Humanoid Characters Using Trigonometric Expressions. *Bahria University Journal of Information and Communication Technology*, Vol. 9 (2), ISSN: 2304-7593. **HEC Recognized "Y" Category Journal.**
- 17 Nisar Ahmed Memon, Fatima Abbasi, **Shehnila Zardari**. Glyph Identification and Character Recognition for Sindhi OCR. *Mehran University Research Journal of Engineering & Technology*. ISSN: 0254-7821. **HEC Recognized "X" Category Journal.**
- 18 Parus Khuwaja, Sunder Ali Khowaja, **Shehnila Zardari**, Imdad Ali Ismaili. The effect of exchange rate volatility on current price and transitional behavior of brokers: A perspective from Agent-based modeling using financial market model. *Sindh University Research Journal (Science Series)*. ISSN: 1813-1743 **ISI indexed. HEC Recognized "X" Category Journal**

Articles in Refereed Conferences

- 19 **Shehnila Zardari**, Rami Bahsoon, Aniko Ekart. Cloud Adoption: Prioritizing Obstacles and Obstacles Resolution Tactics Using AHP. *Requirements Engineering Track, The 29th ACM Symposium On Applied Computing (ACM SAC), Gyeongju, Korea, March 2014*. [Selection rate: 24%]

Book Chapters

- 20 **Shehnila Zardari**, Funmilade Faniyi, Rami Bahsoon. Using Obstacles for Systematically Modelling, Analysing and Mitigating Risks in Cloud Adoption. *In the book on Aligning Enterprise, System and Software Architectures. IGI Global*. ISBN13: 9781466621992 October 2012.
- 21 **Shehnila Zardari**, Funmilade Faniyi, Rami Bahsoon. Using Obstacles for Systematically Modelling, Analysing and Mitigating Risks in Cloud Adoption. *In the book on Cloud Technology: Concepts, Methodologies, Tools, and Applications. IGI Global*. ISBN13: 9781466665392, 2015.

Peer- Reviewed Workshop Papers

- 22 **Shehnila Zardari**, Rami Bahsoon. Cloud Adoption: A Goal-Oriented Requirements Engineering Approach. *In the Proceedings of the ACM/IEEE International Workshop on Cloud Software Engineering, the ACM/IEEE 33rd International Conference on Software Engineering (ICSE), Hawaii, USA May 2011*.

Under Review

- 23 Mukhtiar Ali Unar, David J Murray-Smith, **Shehnila Zardari**, Euan McGookin. Rudder Roll Stabilisation of a Container Ship Using Neural Networks.

Media Coverage & Blogs

- * **Shehnila Zardari**. Trouble in the cloud leaves businesses tied to their servers. *Published by The Conversation*. 15 May 2014
- * **Shehnila Zardari**. The sorry state of research at our universities and how to fix it *Published by DAWN.com* 02 November 2014

Selected Talks

- SEACLOUD *Cloud adoption: a goal-oriented requirements engineering approach*, ACM/IEEE International Workshop on Cloud Software Engineering, the ACM/IEEE 33rd International Conference on Software Engineering (ICSE), 22 May 2011, Hawaii, USA
- ICIME *Software Risk Management*, IEEE International Conference on Information Management and Engineering (ICIME), 4 April 2009, Kuala Lumpur, Malaysia.
- SERG *Using Obstacles for Systematically Modelling, Analysing and Mitigating Risks in Cloud Adoption*, Software Engineering Research Group, 15 November 2011, University of Birmingham, UK
- SERG *Cloud Adoption: Prioritizing Obstacles and Obstacles Resolution Tactics Using AHP*, Software Engineering Research Group, 16 October 2012, University of Birmingham, UK
- 3MT Competition *Cloud adoption: a goal-oriented requirements engineering approach*, Birmingham Three Minute Thesis Competition, 24 Sep 2013, University of Birmingham, UK.

Experience

Research Experience

- August'10 to January'16 **Doctoral Researcher**, *University of Birmingham*, Supervised by Rami Bahsoon, Working on requirements engineering for cloud.

Teaching Experience

- January'16 to date **Assistant Professor**, *NED University of Engineering and Technology, Pakistan*, taught Assembly Language Programming, Software Requirements Engineering, Software Engineering, Software Design and Architecture, Software Project Management.. Developed syllabus and overall course structure, and administered all grades.
- Sep'13- June'15 **Tutor for Artificial Intelligence module**, *University of Birmingham*, assignment preparation, invigilation, evaluate and provide feedback on student progress.
- Sep'13- Feb'14 **Tutor for Commercial Computing module**, *University of Birmingham*, Evaluate and provide feedback on student progress.
- July'09- July'10 **Assistant Professor**, *NED University of Engineering and Technology, Pakistan*, taught Programming Languages (C Programming) and Operating systems. Developed syllabus and overall course structure, and administered all grades.

July'07- **Lecturer**, *NED University of Engineering and Technology, Pakistan*, taught Assembly Language Programming and Object Oriented Programming.
July'09 Developed syllabus and overall course structure, and administered all grades.

Key Responsibilities, at *NED University of Engineering and Technology, Pakistan*, include.

- Teaching students through multiple means - lectures, practicals, tutorials, discussions, seminars
- Maintaining constant contact with students, advising them on academic matters and supervising their extra-curricular activities
- Assisting in curriculum preparation, conducting exams, organizing library/laboratories and other co-curricular activities
- Handing out assignments to students, conducting regular tests and maintaining performance records of students
- Preparing teaching schedule for each academic year
- Performing duties related to holding of examinations
- Remained class advisor of first year and second year students.
- Regularly organizing seminars and workshops for students.
- Supervising final year projects.
- Member of the admission committee for masters' programme.

Other Academic Duties

February '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Computer Science and IT and Department of Computer System Engineering at Sir Syed University of Engineering and Technology.

March '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Information and Medical Technology Department at Baqai Medical University.

April '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Computer Science and Information System at Institute of Business Management.

April '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Computer Science and Information Technology at Jinnah University for Women.

August '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Biomedical Engineering at Ziauddin University.

September '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Computer Science and Information Technology at Muhammad Ali Jinnah University.

October '17 **Expert Sub-Committee**, *Charter Inspection and Evaluation Committee*, Monitoring, Grading and Evaluating the Department of Computer Science at Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Karachi.

Internship

June'04-
July'04 **Industrial training**, *Siemens, Lahore, Pakistan*, Provided as needed support, including developmental and copy/editing of their internal online and printed documentation. Also worked on SAP for managing the data.

Technical Skills

Programming C, C++, Java, VB, ASP, HTML, JSP
Packages Matlab, MS Project, Rational Rose, MS Visio

Fellowships and Awards

2010–2014 Earned merit based scholarship by Government of Pakistan to pursue a PhD
2000 Received presidential merit scholarship in college on outstanding academic performance

Professional Memberships

Life member of Pakistan Engineering Council. Registration Number: COMP/04119.

Academic Refereeing

AESSA Aligning Enterprise, System and Software Architectures, IGI Global, 2012
ICONICS'16 Member Technical Programme Committee. 1st International Conference on Innovations in Computer Science & Software Engineering
MURET Reviewer for Mehran University Research Journal of Engineering & Technology, 2017

Languages

English, Sindhi, Urdu

Citizenship

Pakistan