

# Muhammad Akram

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## PERSONAL STATEMENT:

### *Teaching & Research*

I have over 15 years of teaching, research and development experience. Currently I'm working as a Lecturer in College of Computer Science and Information Systems (CCSIS), Najran University, Kingdom of Saudi Arabia. I am author of two (02) books, eleven (11) journal papers and nine (09) conference papers. I have teaching experience of computer science courses at university level, Development experience of server side, client side, desktop software products & projects using C, C++, Visual Basic, PHP, MySQL and related technologies.

### *NCAAA & ABET Accreditation*

Working with Development & Quality Unit (DQU) at college of Computer Science & Information Systems since last 10+ years. I'm working in strategic planning committee of DQU, Personal self-assessment unit of NCAAA, coordinator of program accreditation unit for computer science department, member of Computer Science and Information Systems curriculum committee, working in NCAAA standards: mission and objectives, learning resources, facilities and equipment, research and relationships with the community. Working in ABET criterion: continuous improvement, curriculum, facilities and institutional support. Also coordinator of BSc courses: Human Computer Interaction, Internet application development, Theory of Computation, Visual Programming, Multimedia Technologies, Algorithm Analysis & Design and Modern Application Development.

## EDUCATION AND QUALIFICATION :

PhD (Information & Communication Technology) Scholar, Universiti Tenaga Nasional (UNiTEN), Malaysia.

Masters of Science in Computer Science (MSCS), Blekinge Tekniska Högskola (BTH), Blekinge Institute of Technology, Sweden (2008)

Master of Computer Science (MCS), University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan (2004)

Bachelor of Science (BSc), University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan. (1999)

## WORK EXPERIENCES :

10/2009 - to date, Lecturer, Najran University, Najran, Saudi Arabia

07/2008 - 09/2009, Software Developer, EuroPak Web, Stockholm, Sweden

02/2006 – 12/2006, Lecturer, University of Azad Jammu & Kashmir, Pakistan.

## TAUGHT COURSES:

Data Structures, Algorithm Design and Analysis, Theory of Computation, Compiler Design & Construction, Programming Paradigms, Programming with JAVA, Operating Systems, Modern Programming Languages, Computer Networks, Mathematics & Computer Graphics, Internet Applications & Web Development.

## PROFESSIONAL SKILLS:

- Languages: PHP 5.0, AJAX, C, C++, Java, Java Script, Visual Basic 6.0, VB Script, OpenGL
- Enterprise Servers: Apache Tomcat, Microsoft IIS
- DBMS: SQL Server, MS Access, MySQL
- Tools: Borland JBuilder, Text Pad, HTML, XHTML, XML, Adobe Acrobat, Microsoft Dreamweaver, Microsoft Office, Microsoft Project, Microsoft Outlook, Microsoft Visio, Dream Weaver,

## PROFESSIONAL MEMBERSHIPS:

Member | International Association of Engineers (IAENG).

Member | The World Scientific and Engineering Academy and Society (WSEAS).

Reviewer | Cognitive Computation, ISSN: 1866-9956 (Print) 1866-9964 (Online) [Impact factor 5.418 (2020)]

## PUBLICATIONS:

### BOOKS

[1] Muhammad Akram & Muhammad Imran Shafi, “*Functional Approach towards Approximation Problems: Suitability of applying functional languages for implementation of approximation algorithms*”, Publisher: LAP LAMBERT Academic Publishing Germany, May 2010, ISBN: 978-3838363509.

[2] Faisal Riaz, Muhammad Akram, and Rashid Mehmood, “*WiMAX Cryptographic Suit Up-gradation: An Advance Approach to the Efficient and Secure WiMAX*”, Publisher: LAP LAMBERT Academic Publishing Germany, September 2010, ISBN: 978-3-8433-5338-0

### JOURNAL PUBLICATOINS

[1]. Al Masud, Shah Murtaza Rashid, Mahmood ul Hassan, Khalid Mahmood, and Muhammad Akram. "An M/M/1 Preemptive Queue based Priority MAC Protocol for WBSN to Transmit Pilgrims' Data.", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 11, No. 10, 2020.

[2]. Al Masud, Shah Murtaza Rashid, Mahmood Ul Hassan, Khalid Mahmood, and Muhammad Akram. "Preemptive Queue Based Modified MAC Superframe for WBSN to Efficiently Transmit Pilgrims' Heterogeneous Data at Ritual Sites: An Analytical Approach." IJCSNS 20, no. 10 (2020): 126.

- [3]. Akram, Muhammad and R. Sulaiman. "Comparative web accessibility evaluation of saudi government websites for compliance with WCAG 1.0 and WCAG 2.0 using automatic web accessibility tools." *Journal of theoretical and applied information technology* 97 (2019): 2656-2668.
- [4]. Muhammad Akram and Rosnafisah Bt Sulaiman, "A Systematic Literature Review to Determine the Web Accessibility Issues in Saudi Arabian University and Government Websites for Disable People" *International Journal of Advanced Computer Science and Applications(IJACSA)*, 8(6), 2017.
- [5]. Muhammad Akram, Dr. Mohammed Arif Siddiqui, MD Kafil uddin, PASSMA: Fingerprint Payment System: A New Way to E-Pay, *International Journal of Computer and Information Technology* (ISSN: 2279 – 0764) Volume 04, Issue 06, November 2015
- [6]. Muhammad Akram, Ahmad M. Taleb and Md. Kafil Uddin, A Qualitative Research Approach to Ensure the Copyright of Multimedia data by using Watermarking Techniques, *International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE)*, Volume 03, Issue 06, June: 2013.
- [7] Md. Kafil Uddin, Ahmad M. Taleb and Muhammad Akram, SMS: Development of an Intelligent Sensor Middleware System for Health Care Management, *International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE)*, Volume 03, Issue 05, May: 2013.
- [8] Ali Al-Hamdi, Muhammad Akram, Ahmed Monjurul Hassan, "Development of and ICT-based layer model for improving managerial decision making on water issues in arid and semi-arid regions", *International Journal of Computer and Information Technology*, Volume 01, Issue 02, November 2012, pages 11-16, ISSN: 2279-0764.
- [9] Muhammad Imran Shafi, Muhammad Akram, Sikandar Hayat, and Imran Sohail, "Effectiveness of Intrusion Prevention Systems (IPS) in Fast Networks", *Journal of Computing*, Volume 2, Issue 6, June 2010, pages 78-84, USA, ISSN: 2151-9617.
- [10] Muhammad Akram, Imran Sohail, Sikandar Hayat, M. Imran Shafi, and Umer Saeed, "Search Engine Optimization Techniques Practiced in Organizations: A Study of Four Organizations", *Journal of Computing*, Volume 2, Issue 6, pages 134-139, June 2010, USA, ISSN: 2151-9617.
- [11] K.M Hasan, M. Saleem Mian, M. Riaz Moghal, Yasir Saleem, Faisal Riaz, Muhammad Akram, Waseem K. Qureshi, "Man Brain is Finite Automata Machine" *New Horizons, Journal of IEEEEP*, Volume 45, July-Sep 2004.

#### CONFERENCES PUBLICATIONS:

- [1]. M. Akram and R. Bt Sulaiman, "An Empirical Study to Evaluate the Accessibility of Arabic Websites by Low Vision Users," 2020 8th International Conference on Information Technology and Multimedia (ICIMU), 2020, pp. 206-211, doi: 10.1109/ICIMU49871.2020.9243565.
- [2] Ali Al-Hamdi, Ahmed Manjour, Muhammad Akram, "WSN-Based Support for Irrigation Efficiency Improvements in Arab Countries", *International Arab Conference on Information*

Technology (ACIT), Riyadh, Saudi Arabia, ISSN: 0857-1812, pp: 256-264, December 11-14, 2011.

- [3] Muhammad Imran Shafi, and Muhammad Akram, "An explorative study on applying functional language for approximation algorithms", Second International Conference on Business, Technology and Engineering (ICBTE-2010), 23-24 January 2010.
- [4] Muhammad Akram, Muhammad Imran Shafi, Muhammad Hamid Fayaz, and Sikandar Hayat, "Implementation of Web Security using Packet-Scrutinizing Router", Second International Conference on Business, Technology and Engineering (ICBTE-2010), 23-24 January 2010.
- [5] Muhammad Akram, M. Hamid Fayaz, M. Imran Shafi, M. Usman Shafique, & Imran Ali, "Qualitative and Quantitative study for Requirement Change Management Model", Second International Conference on Business, Technology and Engineering (ICBTE-2010), 23-24 January 2010.
- [6] Muhammad Akram and Sikandar Hayat, "Qualitative & Quantitative analysis of tiered architecture of web applications" Proc. of 9<sup>th</sup> National Research Conference on Management and Computer Science, SZABIST Islamabad Pakistan. 25 June 2009.
- [7] M. Riaz Moghal, M. Waris, M. Shabir, Muhammad Akram, Yasir Mehmood, Faisal Riaz, "Reduction & Control of Automobile Pollution in Vehiclized Engine Using Simulative Techniques". Accepted for presentation in 1<sup>st</sup> Kashmir International Science Conference, University of Azad Jammu & Kashmir, Muzaffarabad, Pakistan, September 2005.
- [8] Dr. M. Riaz Moghal, Muhammad Qasim, Akhlaq A. Khan, Yasir Mehmood, Muhammad Akram, "Bottom-up-Approach for Generating Spatial Database for Land Revenue Department", accepted for presentation in 1<sup>st</sup> Kashmir International Science Conference, University of Azad Jammu & Kashmir, Muzaffarabad, Pakistan, September 2005.
- [9] Mohammad Riaz Moghal, Faisal Riaz, Muhammad Akram, Waseem K Qureshi, M. Shabbir, N. Hussain, "Man is Deterministic or Non Deterministic Machine", 4<sup>th</sup> International Science Conference, The University of Azad Jammu & Kashmir, Muzaffarabad, Pakistan, October 6-9, 2004.

#### **HONORS/AWARDS:**

- Appreciation Certificate for performing assigned tasks and participation on "Career Day" held on April 03 to 05, 2018 organized by Najran University, Kingdom of Saudi Arabia.
- Appreciation Certificate for good performance in academic year 2010-2011, awarded by College of Computer Science & Information System, Najran University, Saudi Arabia.
- Appreciation Certificate "Shukar-al-Taqdeer", working in Personal Self Assessment (PSA) unit, awarded by Najran University, Saudi Arabia. 2010.
- Certificate for successful organization of 1<sup>st</sup> AJK student Convention 2005, awarded by President of AJK and vice Chancellor of AJK University.
- The National Cadet Corps, Certificate of Service.