MUHAMMAD ARSHAD (PHD)

Dean & Associate Professor | KIMEP University, Almaty, Kazakhstan | 06/2025 - Present

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<u>LinkedIn</u> | <u>Google Scholar</u> | <u>Researchgate</u> | <u>Scopus</u> | <u>Web of Science</u> | <u>ORCID</u>

CAREER SUMMARY

A seasoned academic leader with over two decades of experience in Computer Science, specializing in areas like the Internet of Things (IoT), Cloud Computing (AWS), and Software Engineering. Serving as a Professor, Head of Department, and Dean at various esteemed institutions, including City University of Science and Information Technology, Has spearheaded curriculum innovation and fostered industry partnerships to prepare students for the evolving tech landscape. Recognized as an Approved Supervisor by the Higher Education Commission, has guided numerous research initiatives, contributed extensively to academic publications, and played an instrumental role in accreditation processes. Known for his strategic vision and ethical leadership, remains committed to nurturing future tech leaders and advancing the field of Computer Science.

EDUCATION

- Ph.D. In Computer Science | April 2010 | School of Computing & Mathematical Sciences, Liverpool John Moores University, Liverpool, UK
 - Dissertation Title: A Gateway Solution for Accessing Networked Appliances (Supervisors: Dr. Bob Askwith (Late) and Prof. Madjid Merabti).
- M.Sc. Computer Science | July 2002 | Department of Computer Science, University of Peshawar, Peshawar, Pakistan

PROFESSIONAL EXPERIENCE

Dean & Associate Professor | KIMEP University, Almaty, Kazakhstan | 06/2025 - Present

- Develop the College strategy; Implement policies and regulations within the College;
- Coordinate the assessment and development of academic programs within the College;
- Ensure the proper use and allocation of all resources physical, information, human and financial, including delivery to plan within budget;
- Contribute fully to the College's planning and communications processes and lead the development of College plans;
- Oversee all personnel matters involving academic and non-academic employees including: recruiting, appointment, re-appointment; termination and dismissal; faculty evaluation, promotion and merit; and the preparation and approval(s) of faculty workload plans and long-range professional development plans.
- Maintain good working relationships with faculty and administration in all academic and non-academic areas;
- Communicate effectively with various constituencies within the University, surrounding community and State regarding the College; Chair the College Council;
- Assure the quality of academic processes and outputs (research, consultancy, and teaching), the
 maintenance of academic standards, and ensure a fair and appropriate service to students. Maintain
 effective communication between students, faculty and chairs within the College and with other academic
 unit personnel;

- Serve as a liaison with relevant professional associations and state and national regulatory and accrediting agencies;
- Operate as a senior manager of the Institution at the College level and assist the President's Cabinet as required;
- Insure that College policies and practices are consistent with those of the University; Articulate the budgetary needs of the College and oversee the allocation and expenditure of resources;
- Oversee the preparation of class schedules and complying with institutional reporting requirements;
- Work with Chairs to encourage grant applications by faculty members and prepare proposals for outside funding of special projects;

Professor (Computational Sciences and Software Engineering) | K.Zhubanov Regional University, Heriot-Watt University, UK (Aktobe Campus), Kazakhstan | 09/2024 – 05/2025

- Worked as international faculty in Computer Engineering. Taking lectures, tutorial and labs in Computational Sciences and Software Engineering
- Taught User Experimental Design, Web Programming and Data Structure in Fall 2024 Semester and Introduction to Software Engineering, Database Management Systems in Spring 2025.

Professor & HoD Department of Computer Science & Dean Faculty of Computing and Numerical Sciences | City University of Science and Information Technology, Peshawar, Pakistan | 09/2019 – 09/2024

- Directed strategic academic initiatives for the Faculty of Computing and Numerical Sciences, overseeing 40+ faculty members and 1,000+ students.
- Led the development and launch of cutting-edge undergraduate programs in Data Science and Artificial Intelligence, aligning them with industry trends.
- Strengthened industry-academia ties by establishing MOUs with leading technology firms, enhancing internship and employment opportunities for students.
- Championed the department's accreditation efforts, ensuring compliance with the National Computing Education Accreditation Council (NCEAC).
- Enhanced faculty performance through structured mentoring and professional development programs.
- Managed departmental operations, including budgeting, faculty recruitment, and workload allocation. Spearheaded curriculum reforms to integrate emerging technologies like IoT and Cloud Computing.

Key Achievements:

- Launched of cutting-edge undergraduate programs in Data Science and Artificial Intelligence
- Achieved record-high graduate employment rates through industry collaborations.
- Streamlined academic policies and introduced support mechanisms for struggling students.
- Improved student satisfaction scores through enhanced academic advising and course offerings.

Assistant Professor and Program Coordinator Computing & Web Engineering | Sohar University, Faculty of Computing and Information Technology, Sohar, Oman | 03/2013 – 09/2019

- Coordinated the Computing and Web Engineering Program, aligning it with Australian Computer Society (ACS) accreditation requirements.
- Served on multiple university committees, including Teaching and Learning, Quality Assurance, and Research Ethics.
- Mentored junior faculty, fostering academic excellence and collaboration.

Key Achievements:

Led a successful accreditation for three undergraduate programs.

- Enhanced program outcomes by integrating industry input into the curriculum.
- Conducted a comprehensive revision of existing undergraduate programs to align them with industry requirements and developed Quality Assurance documentation for the computing faculty.

Assistant Professor & Head of Computer Science Department | City University of Science and Information Technology, Peshawar, Pakistan | June 2011 – Feb 2013

- Conducted lectures, tutorials, and labs for both undergraduate and postgraduate courses in computer science, including subjects like Computer Architecture, Operating Systems, Artificial Intelligence, and Theory of Automata.
- Handled daily departmental responsibilities, including class allocation and timetable management.
 Assessed teacher performances, conducted regular meetings with staff members, participated in the
 hiring of new staff, and made recommendations and implemented changes to align with departmental
 goals and objectives. Also, served as a member of the board of studies and the board of faculties and
 academics.
- My achievement includes: overhauled the entire curriculum for all computer science programs.
 Additionally, established the Academia/Industry collaboration forum and organized an event to enhance
 graduate employment prospects. Successfully reintroduced an MS program at the university and played
 a significant role in achieving the first ranking in Pakistan by the Higher Education Commission in
 Computer Science in 2012.

Assistant Professor and Head of Computer Science Department | Islamia College University, Peshawar, Pakistan | 09/2010 – 05/2011

- Conducted lectures, tutorials, and labs for undergraduate and postgraduate level courses, including Software Engineering I and II, Computer Architecture, and Advanced Computer Architecture.
- Handled daily departmental tasks, including class scheduling and time tables, evaluated teacher
 performances, conducted regular meetings with staff members, participated in the recruitment of new staff,
 and made recommendations and implemented changes to achieve departmental goals and objectives.

Seasonal Lecturer/Demonstrator | School of Computing & Mathematical Sciences, Liverpool John Moores University, Liverpool, UK | 04/2004 – 04/2009

 My duties encompassed attending lab sessions and lectures, providing tutorial assistance to students, collecting and reviewing course assignments, and assisting students with general computer-related issues in learning resource centers. Organized research seminars within my department and managed our research laboratory. The courses taught included Java, C/C++, Network Management, and Research Methods.

Customer Relations Manager | Barclays Bank Plc, UK (Part Time) | 04/2004 - 04/2009

- Dealt with head office complaints, worked with Branch and Area Managers to assist in achieving customer service levels, training staff and arranging events to motivate teams.
- During my stay at the bank, I worked on different positions started from Customer Service Advisor in contact center where we had to achieve our sales targets. Also worked as Fraud Investigation Officer for Debit/Credit card and Online Banking to monitor fraudulent activities on customer accounts.
- Worked as part of the team for implementing new banking software involves staff training, which gave me
 a practical experience be the part of the team to implement management information system in one of the
 largest banks in the globe.

Demonstrator/Merchandiser/Mystery Shopper | Gekko, NewBury, UK (Freelancer) | 04/2004 – 04/2010

- As a merchandiser not only to advice store how to use space effectively but also had to do it myself by selecting an appropriate location in the store. As Demonstrator not only deal with the customers but train store staff for the future to increase product sale, which includes demonstrating to staff first, give handouts and presentation in the classroom.
- As a part of my job, conducted road shows for different products such as laptops, entertainment. My few projects were: Switch over to digital TV, Acer timeline series, Toshiba TV, Samsung LED TV and Sony.
- Brand manager for Acer Timeline series in Northwest, England. This role involved extensive staff training for different product and brands. I had to arrange different events during staff training to motivate them.

Customer Service Advisor/Trainer | Vodafone, UK (Part Time) | 01/2004 – 02/2005

- Joined as call center agent to take inbound and make outbound calls for sales and promotion.
- Later promoted as Trainer to support newly joined staff to help them to solve customer queries and handle complaints. Also to support my line manager in managerial duty.

Lecturer Computer Science | Abasyn Institute of Management and Information Sciences, Peshawar, Pakistan | 04/2002 – 04/2003

- Held the position of lecturer in subjects such as Data Communications, Networking, Databases, Software Engineering, Management Information Systems, Business Intelligence, and Decision Support Systems.
- Served as the coordinator for the MIS Program, overseeing both undergraduate and postgraduate programs, and actively participated in both internal and external departmental meetings.

PROFESSIONAL CERTIFICATIONS

- 1. AWS Cloud Technical Essentials | Coursera Amazon Web Services | October 25,2023
- 2. Foundations of Cybersecurity | Google | February 11, 2024
- 3. Play It Safe: Manage Security Risks | Google | February 13, 2024
- **4. Introduction to the Internet of Things and Embedded Systems** | University of California, Irvine | September 13, 2023
- 5. Connect and Protect: Networks and Network Security | Google | February 18, 2024
- 6. Agile Project Management | Google | February 7, 2024
- 7. Ethical Hacking Essentials (EHE) | EC-Council | January 24, 2024
- 8. Developing Your Emotional Intelligence | Microsoft and LinkedIn | July 20, 2024
- 9. LinkedIn Learning Human Skills for Managers Professional Certificate | Linkedin | July 23, 2024
- 10.Introduction to Prompt Engineering for Generative AI (2023) | Linkedin | December 2024
- 11. Foundations of User Experience (UX) Design | Google | Oct 2024
- 12.Be the Manager People Won't Leave | Linkedin | July, 2024
- 13.LinkedIn Learning Certificate of Completion | Linkedin | July, 2024
- 14. Communication Skills for Modern Management | Linkedin | July, 2024
- 15.Leading and Motivating People with Different Personalities | Linkedin | July, 2024

CONFERENCE PRESENTATIONS

- 1. IEEE 23rd International Symposium on Consumer Technologies (ISCT), Ancona, Italy (19-21 June 2019).
- 2. 16th International Conference on Practical Applications of Agents and Multi-Agent Systems, Toledo, Spain (20-22 June 2018).
- **3.** 10th International Conference on Agents and Artificial Intelligence (ICAART), Funchal, Portugal (16 18 January 2018).
- **4.** 6th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking, and Broadcasting (PGNet 2005), Liverpool John Moores University, Liverpool, UK (27-28 June 2005).

- 5. 7th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting (PGNet 2005), Liverpool John Moores University, Liverpool, UK (27-28 June 2006).
- **6.** 8th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, Liverpool John Moores University, Liverpool, UK (28-29 June 2007).
- **7.** 9th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, Liverpool John Moores University, Liverpool, UK (28-29 June 2008).
- **8.** 10th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting (PGNet 2005), Liverpool John Moores University, Liverpool, UK (21-22 June 2010).

CONFERENCE ORGANIZATION

- 1. 5th international Conference on Emerging Trends in Engineering, Management & Sciences (ICETEMS 2023), Dec 20 21 2023.
- 2. 4th international Conference on Emerging Trends in Engineering, Management & Sciences (ICETEMS 2021), Oct 13 -14 2021 (Convener I.T / Networking Committee).

CONFERENCES - TECHNICAL PROGRAM COMMITTEE MEMBER

- 1. The 9th IEEE Asia Pacific Conference on Wireless and Mobile 2024 (APWiMob 2024), November 28-30, 2024, Bandung, Indonesia.
- 2. The 8th IEEE Asia Pacific Conference on Wireless and Mobile 2023 (APWiMob 2023), October 10 12, 2023, Bali, Indonesia.
- **3.** The IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT'2024), July 28 30, 2024, Bali, Indonesia.
- **4.** The 2022 IEEE International Conference on Internet of Things and Intelligence System (IoTalS 2022), Nov 24 26, 2022, Bali, Indonesia.
- **5.** The IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT'2022), July 28 30, 2022, Bali, Indonesia.
- **6.** The IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT'2021), 27-28 July 2021, Bandung, Indonesia.
- 7. 5th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI), October 16 18, 2018, Ijen Suites Resort & Convention Malang, Indonesia.
- **8.** 10th International Conference on Open Source Systems and Technologies (ICOSST-2016), (15 17 December 2016), Lahore, Pakistan.
- **9.** International Biometrics Smart Government Summit (IBMSGS 2015), 18-, 20 Jan, 2015, ElMouradi Port El Kantaoui, Tunisia.
- **10.** 9th International Conference on Open Source Systems and Technologies (ICOSST-2015), (17 19 December 2015), Lahore, Pakistan.
- **11.** International Conference on Advanced Wireless, Information, and Communication Technologies (AWICT 2015), December 5-7, 2015, Tunisia.
- **12.** Conference on Information Assurance and Cyber Security 2015 (CIACS 2015), (December 18, 2015), Islamabad, Pakistan.
- **13.** Conference on Information Assurance and Cyber Security 2014 (CIACS 2014), June 12 13, 2014, Islamabad, Pakistan.
- **14.** 8th International Conference on Open Source Systems and Technologies (ICOSST-2014), December 18 20, 2014, Lahore, Pakistan.
- **15.** 2nd National Conference on Information Assurance 2013 (NCIA-2013), December 11-12 December 2013, Military College of Signals (MCS), Rawalpindi, Pakistan.
- **16.** 11th International Conference on Frontiers of Information Technology (FIT 2013), December 16 18, 2013, Islamabad, Pakistan.
- **17.** 4th International Conference on Developments in e-Systems Engineering (DeSE 2012), September 5 7, 2012, Bucharest, Romania.
- **18.** 1st International Conference on Computer Networks and Information Technology (ICCNIT 2011), July 11 13, 2011, Bara Gali, Pakistan.
- **19.** 9th International Conference on Frontiers of Information Technology (FIT 2011), December 19 21, 2011, Islamabad, Pakistan.

- **20.** 3rd International Conference on Developments in e-Systems Engineering (DeSE 2011), December 6 8, 2011, Dubai, UAE.
- **21.** 8th International Conference on Frontiers of Information Technology (FIT 2010), December 21 23, 2010, Islamabad. Pakistan.

SEMINARS

- 1. University of Malakand title "Peer-to-Peer Networks: An Overview" (December 2010).
- 2. City University Peshawar title "Peer-to-Peer Networks: An Overview" (March 2011).
- 3. University of Peshawar title "Writing Up Your Ph.D." (Feb 2011).
- **4.** University of Peshawar two days' seminar on networking includes ideas of Networking, it's working and working of the Internet.

INVITED SPEAKER

- **1.** Sarhad University of Science and Information Technology, Peshawar in collaboration with PISA title "Emerging Trends, Threats and Solutions of Cyber Security" (January 2012).
- 2. Pakistan Academy for Rural Development title "E-Government" (September 2011).
- **3.** Agriculture University Peshawar in collaboration with PASTIC title "Intellectual Property" (September 2011).
- 4. Abdul Wali Khan University (Mardan Campus) in collaboration with HEC title "Hypermedia" (March 2011).

JOURNAL PUBLICATIONS

- Muzammil Khan, Fahmida Gulan, Muhammad Arshad, Abnash Zaman, and Ammara Riaz, "Early and late blight disease identification in tomato plants using a neural network-based model to augmenting agricultural productivity", Science Progress, 107(3), pp. 1-27 (2024). https://doi.org/10.1177/00368504241275371
- 2. Muzammil Khan, Abnash Zaman, Sarwar Shah Khan, and Muhammad Arshad, "A hybrid approach for automatic segmentation and classification to detect tuberculosis", Digital Health, 10, pp. 1-25 (2024). https://doi.org/10.1177/20552076241271869
- 3. Mumtaz Ali, Muhammad Arshad, Ijaz Uddin, Muhammad Binsawad, Abdullah Bin Sawad, Osama Sohaib, "Efficient context-aware computing: a systematic model for dynamic working memory updates in context-aware computing", PeerJ Computer Science, 10, 2024. https://doi.org/10.7717/peerj-cs.2129
- **4.** Aiman, Muhammad Arshad, Bilal Khan, Sadique Ahmad, Muhammad Asim, "Predicting Age and Gender in Author Profiling: A Multi-Feature Exploration", Computers, Materials and Continua, 79(2), pp. 3333-3353, 2024. https://doi.org/10.32604/cmc.2024.049254
- 5. Mumtaz Ali, Muhammad Arshad, Ijaz Uddin, Gauhar Ali, Muhammad Asim, Mohammed ELAffendi, "A Resource Aware Memory Requirement Calculation Model for Memory Constrained Context-Aware Systems", IEEE Access, vol. 12, pp. 19320-19329, 2024. http://doi.org/10.1109/ACCESS.2024.3361317.
- **6.** Aiman, Muhammad Arshad, Bilal Khan, Khalil Khan, Ali Mustafa Qamar, Rehan Ullah Khan, "ABMRF: An Ensemble Model for Author Profiling Based on Stylistic Features Using Roman Urdu", Intelligent Automation and Soft Computing, 2024, pp. 1-17. http://dx.doi.org/10.32604/iasc.2024.045402
- 7. Muhammad Shahroz Gul Qureshi, Bilal Khan, Muhammad Arshad "ML-Based Model for Risk Prediction in Software Requirements", International Journal of Technology Diffusion,13(1), 2022: pp.1-17. http://doi.org/10.4018/IJTD.314235
- **8.** Zia, K.; Farooq, U.; Shafi,M.; Arshad, M. "An Agent-Based Model of Task-Allocation and Resource-Sharing for Social Internet of Things", IoT 2021,2,187-204. https://doi.org/10.3390/iot2010010
- **9.** Kashif Zia, Umar Farooq, Arshad Muhammad, "Agent-Based Modeling of a Self-Organized Food Safety System", Safety (Scopus), 5(3). https://doi.org/10.3390/safety5030052
- 10. Kashif Zia, Arshad Muhammad, Abbas Khalid, Ahmad Din, and Alois Ferscha, "Towards Exploration of Social in Social Internet of Vehicles Using an Agent-Based Simulation", Complexity(Scopus), 2019. https://doi.org/10.1155/2019/8201396

- **11.** Haseeb Ali, Mohd Najib Mohd Salleh, Kashif Hussain, Arshad Ahmad, Ayaz Ullah, Arshad Muhammad, Rashid Naseem, Muzammil Khan, "A review on data preprocessing methods for class imbalance problem", International Journal of Engineering Technology(Scopus),8(3),pp.390-397, 2019.
- **12.** Arshad Muhammad, Kashif Zia, Dinesh Kumar Saini, "Population Dynamics Necessary to Avert Unpopular Norms", Lecture Notes in Computer Science (Springer)(Scopus), pp. 64-75,2018.
- **13.** Kashif Zia, Dinesh Kumar Saini, Arshad Muhammad, and Umar Farooq, "Agent-Based Modeling of Society Resistance against Unpopular Norms", Informatica (Scopus),2019, https://doi.org/10.31449/inf.v43i2.1888
- **14.** K. Zia, D. K. Saini, and A. Muhammad, "Efficient Evacuation in a Multi-Exit Environment: An Agent-based Decision Support Model", International Journal of Information and Decision Sciences (Scopus), 11(4), pp. 355-375,2019. https://doi.org/10.1504/IJIDS.2019.103352
- **15.** Iqbal Javed, Murad Khan, Muhammad Talha, Haleem Farman, Bilal Jan, Arshad Muhammad, and Hasan Ali Khattak, "A Generic Internet of Things Architecture for Controlling Electrical Energy Consumption in Smart Homes", Sustainable Cities and Society (Elsevier)(Scopus), 43, pp. 443-450, 2018. https://doi.org/10.1016/j.scs.2018.09.020
- 16. Haleem Farman, Bilal Jan, Huma Javed, Naveed Ahmad, Javed Iqbal, Muhammad Arshad, Shaukat Ali, "Multi-criteria based zone head selection in Internet of Things based wireless sensor networks", Future Generation Computer Systems (Elsevier)(Scopus), 87, pp. 364-371, 2018. https://doi.org/10.1016/j.future.2018.04.091
- **17.** Murad Khan, Javed Iqbal, Muhammad Talha, Muhammad Arshad, Muhammad Diyan, Kijun Han, "Big Data Processing using Internet of Software Defined Things in Smart Cities", International Journal of Parallel Programming (Springer)(Scopus), pp. 1-14, 2018. https://doi.org/10.1007/s10766-018-0573-y
- **18.** Assad Mehmood, Kashif Zia, Arshad Muhammad, Dinesh Kumar Saini, "Missing observation approximation for spatiotemporal profile reconstruction in participatory sensor networks", International Journal of Crowd Science, 2(2), pp.108-122, 2018. https://doi.org/10.1108/ijcs-05-2018-0009
- **19.** Kashif Zia, D. K. Saini, Arshad Muhammad, and Alois Ferscha, "Nature-Inspired Computational Model of Population Desegregation Under Group Leaders Influence", IEEE Transactions on Computational Social Systems (Scopus),5(2), pp. 1-12, 2018. https://doi.org/10.1109/tcss.2018.2818324
- **20.** Nabawiya Khamis Al Masuudi, Arshad Muhammad, Mabruk Ali Fekihal, Dinesh Kumar Saini, "Planning Critical Infrastructure based on Population Growth and Environmental Constraints", TEM Journal (Scopus), 7(1), pp. 159-163, 2018.
- **21.** A. Muhammad, D. K. Saini, K. Zia, and M. A. Fekihal, "Educational Aspects of Service Orientation: Smart Home Design issues and Technologies", TEM Journal (Scopus), 6(2), pp. 250-257, 2017.
- **22.** M. Zafar, K. Zia, D. K. Saini, A. Muhammad, and A. Ferscha, "Modeling human factors influencing herding during evacuation", International Journal of Pervasive Computing and Communications (Scopus), 13(2), pp. 211-234, 2017. https://doi.org/10.1108/ijpcc-03-2017-0024
- 23. Kashif Zia, Katayoun Farrahi, Arshad Muhammad and Dinesh Kumar Saini, "Mobile Sensing for Data-Driven Mobility Modelling", International Journal of Advanced Computer Science and Applications (Scopus), 8(1), pp. 420-424, 2017. https://doi.org/10.14569/ijacsa2017.080153

CONFERENCES PUBLICATIONS

- 1. Kashif Zia, Sanad Al Maskari, Dinesh Kumar Saini, Arshad Muhammad, Umar Farooq,"A Simulation Model Demonstrating the Impact of Social Aspects on Social Internet of Things", 21st International Conference on Information Integration and Web-based Applications Services (iiWAS), Munich, Germany, pp. 202-211 (2 4 December 2019). https://doi.org/10.1145/3366030.3366076
- 2. Arshad Muhammad, Kashif Zia, "Feasibility of Recommendation System Mediated by Social Internet of Vehicles", IEEE 23rd International Symposium on Consumer Technologies (ISCT), Ancona, Italy, pp. 41-46 (19-21 June 2019). 10.1109/ISCE.2019.8900991
- 3. Sanad Al-Maskari, Kashif Zia, Arshad Muhammad, Dinesh Kumar Saini, "Impact of Mobility Mode on Innovation Dissemination: An Agent-Based Simulation Modeling", 15th International Conference on Simulation of Adaptive Behavior, Frankfurt, Germany, pp. 3-14 (14-17 August 2018). https://doi.org/10.1007/978-3-319-97628-0_1
- 4. Kashif Zia, Arshad Muhammad, D. K. Saini and Alois Ferscha, "Agent-Based Model of Smart Social Networking-Driven Recommendations System for Internet of Vehicles", 16th International Conference on Practical Applications of Agents and Multi-Agent Systems, Toledo, Spain, pp. 275-287 (20-22 June 2018). https://doi.org/10.1007/978-3-319-94580-4 22

- 5. Kashif Zia, D. K. Saini, Arshad Muhammad and Alois Ferscha, "A Demonstration of Simulation Modeling for SloV Recommendations System", 16th International Conference on Practical Applications of Agents and Multi-Agent Systems, Toledo, Spain, pp. 371-374 (20-22 June 2018). https://doi.org/10.1007/978-3-319-94580-4 41
- 6. Kashif Zia, Kahalifa Albadi, D. K. Saini and Arshad Muhammad, "Conditions Leading Towards a more Robust Food Safety System: The Results of an Agent-Based Social Simulation", 9th International IEEE Conference Dependable Systems, Services and Technologies UKRAINE, KYIV, (24-27 May 2018). https://doi.org/10.1109/dessert.2018.8409172
- 7. Salleh, Mohd Najib Mohd; Hussain, Kashif; Cheng, Shi; Shi, Yuhui; Muhammad, Arshad; Ullah, Ghufran; Naseem, Rashid, "Exploration and Exploitation Measurement in Swarm-Based Metaheuristic Algorithms: An Empirical Analysis", 3rd International Conference on International Conference on Soft Computing and Data Mining (SCDM), Johor, Malaysia, pp. 24-32 (06 07 February 2018). https://doi.org/10.1007/978-3-319-72550-5-3
- **8.** Arshad Muhammad, Kashif Zia and Dinesh Kumar Saini, "Agent-based Simulation of Socially inspired Model of Resistance against Unpopular Norms", 10th International Conference on Agents and Artificial Intelligence (ICAART), Funchal, Portugal, pp. 133-139 (16 18 January 2018). https://doi.org/10.5220/0006735501330139
- 9. K. Zia, A. Muhammad and D. K. Saini, "Socially aware peers for futuristic web of things", 9th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Bucharest, pp. 579-583 (21-23 Sept 2017). https://doi.org/10.1109/idaacs.2017.8095039
- 10. Zafar, Muzna and Zia, Kashif and Muhammad, Arshad and Ferscha, Alois, "An Agent-Based Model of Crowd Evacuation Integrating Agent Perception and Proximity Pressure", 14th International Conference on Advances in Mobile Computing and Multi Media, Singapore, pp.12-19 (28-30th November 2016). https://doi.org/10.1145/3007120.3007143
- 11. Nabawiya Khamis Al Masuudi, and Arshad Muhammad, "A Spatial Planning of Public Schools Distribution in Sohar Using GIS", in New Trends in Multidisciplinary Research and Practice 2015, Istanbul, Turkey, (4-5th November 2015).
- **12.** Khalid Haseeb, Muhammad Arshad, Shazia Yasin, Naveed Abbas, "A Survey of VANETs Authentication", 9th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, Liverpool, UK, pp. 84-87, (21-22 June 2010).
- 13. Arshad Muhammad, Abdullahi Arabo, Madjid Merabti, Qi Shi and Bob Askwith, "A Secure Gateway Service for Accessing Networked Appliances", 5th International Conference on Systems and Networks Communications (ICSNC09), Nice, France, pp. 183-188, (22-27 August 2010). https://doi.org/10.1109/icsnc.2010.35
- 14. A.Muhammad, P. Fergus, M.Merabti and B. Askwith, "Peer-to-Peer Overlay Gateway Services for Home Automation and Management", 24th International Workshop on Telecommunication Networking, Applications and Systems, Perth, Australia, pp. 880-886, (20-23 April 2010) https://doi.org/10.1109/waina.2010.150
- **15.** A.Muhammad, M. Merabti and B. Askwith, "E-System: Package Delivery Framework", 2nd International Conferences on Developments in eSystems Engineering (DeSE '09), Abu Dhabi, UAE, pp. 196-201, (14-16 December 2009) https://doi.org/10.1109/dese.2009.38
- **16.** A.Muhammad, M. Merabti. and B. Askwith, "An Ad Hoc Gateway Service for Flexible Access to Networked Appliances", 8th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting, Liverpool, UK, pp. 141-145, (28-29 June 2007).
- 17. A.Muhammad, M. Merabti, B. Askwith and P. Fergus, "Ad Hoc Gateway Service for Automatic Package Delivery using Networked Appliances", 2007 IEEE Wireless Communications and Networking Conference (WCNC'07), Kowloon, China, pp. 2578-2583, (11-15 March 2007). https://doi.org/10.1109/wcnc.2007.479
- **18.** A.Muhammad, M. Merabti and B. Askwith, "An Ad Hoc Gateway Service for Discovering and Composing Networked Appliances", 6th Annual Postgraduate Symposium on the Convergence of Telecommunications, Networking and Broadcasting (PGNet 2005), Liverpool, UK, pp. 377-382, (27-28 June 2005).

BOOK CHAPTERS PUBLISHED

- Zartasha Saeed, Shahab Haider, Zulfiqar Ali, Muhammad Arshad, Iftikhar Alam, "On the Current State of Privacy Risks in Software Requirement Elicitation Techniques." Protecting User Privacy in Web Search Utilization, IGI Global, 2023, pp. 160-185. https://doi.org/10.4018/978-1-6684-6914-9.ch008
- 2. Kashif Zia, Arshad Muhammad, Dinesh Kumar Saini, "Modeling and Assessment of Resource-Sharing Efficiency in Social Internet of Things", Dependable IoT for Human and Industry Modeling, Architecting,

- Implementation, River Publishers Series in Information Science and Technology (Scopus), pp. 83-100, ISBN: 9788770220149 (December 2018).
- 3. Dinesh Kumar Saini, Kashif Zia, and Arshad Muhammad, "Software Architecture for Smart Cities and Technical Solutions with Emerging Technologies Internet of Things", Dependable IoT for Human and Industry Modeling, Architecting, Implementation, River Publishers Series in Information Science and Technology (Scopus), pp. 293-304, ISBN: 9788770220149 (December 2018).
- **4.** Dinesh Kumar Saini, Kashif Zia, Arshad Muhammad, "Benchmarking Big Data Recommendation Algorithms using Hadoop or Apache Spark", IET Big Data Recommender Systems, Recent Trends and Advances, pp. 27-40 (2019).

SKILLS & ABILITIES

Technical Skills: Artificial Intelligence, Internet of Things (IoT), Generative Al Tools, Foundations of Cybersecurity, Ethical Hacking Essentials, Software Engineering, Computer Science, Operating Systems, Computer Architecture, Latex, User Experimental Design, Data Structure & Algorithms, Information Security, Switching and Routing Techniques, Cloud Computing, Information Security and Auditing, Business Intelligence and Decision Support Systems, Information Technology Management, Management Information System, System Modeling and Simulation, E-Business and E-Environment, Prompt Engineering.

Academic & Professional Skills: Curriculum Development, Academic Advising, University Teaching, Department Coordination, Accreditation (NCEAC, ACS), Team Leadership, Head of Department, Dean of the Faculty, Computer Ethics, Artificial Intelligence (AI), Team Management, Emotional Intelligence, Strategic Thinking, Change Management.

Project Management & Soft Skills: Agile Project Management, Developing Your Emotional Intelligence, Learning Human Skills for Managers, Interpersonal and Communication Skills, People Management.

LANGUAGES

Pashto (Fluent); Urdu (Fluent); English (Fluent); Hindi (Fluent)

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