



# DR. SHADAB ALAM

## Curriculum Vitaé

**Associate Professor, Department of Computer Science,**  
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### CAREER OBJECTIVE

To leverage over a decade of expertise in teaching, research, and academic leadership to advance educational excellence, foster innovation, and drive transformative interdisciplinary growth while enhancing the impact and reputation of the institution.

### CAREER OVERVIEW

Accomplished academic professional with over a decade of experience in teaching, research, curriculum development, quality assurance, accreditation, and leadership in Computer Science. Recognized among the world's top 2% of scientists (by Stanford University), with expertise in information security, blockchain, IoT, smart healthcare, and machine learning. Holder of multiple patents and over 80 publications, with a proven ability to design innovative curricula, advance academic standards, and lead quality accreditation processes to meet evolving academic and industry needs.

### PROFESSIONAL APPOINTMENTS

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| <b>2024 - Present</b> | <b>Associate Professor</b> , Department of Computer Science, College of Engineering and Computer Science, Jazan University, Jazan, Saudi Arabia (since 15 <sup>th</sup> May 2024).                               |
| <b>2014 - 2024</b>    | <b>Assistant Professor</b> , Department of Computer Science, College of Engineering and Computer Science, Jazan University, Jazan, Saudi Arabia (3 <sup>rd</sup> . September 2014 to 14 <sup>th</sup> May 2024). |
| <b>2013 – 2014</b>    | <b>Project Scientist</b> in the ERP Mission Project funded by NME-ICT Mission, MHRD, Government of India (2 <sup>nd</sup> December 2013 to 30 <sup>th</sup> August 2014).  |
| <b>2011 – 2013</b>    | <b>Counsellor/Part-Time Faculty member</b> for BCA and MCA courses in the Regional Study Centre, IGNOU, AMU Study Centre (01 <sup>st</sup> January 2011 to 30 <sup>th</sup> November 2013).                      |

**Total Teaching Experience: More than 11 Years**

## Professional Recognition and Awards

- **Top 2% of Scientists Worldwide**
  - **Ranked in the Stanford University Global Scientist List, 2024**
    - Recognized by Stanford University and published by Elsevier, this prestigious ranking places me among the top 2% of scientists worldwide. The selection is based on citation metrics that reflect the significant impact and utility of my research contributions to Computer Science.

<b>2023 - Present</b>	<b>Research Fellow</b> at INTI International University, Malaysia.
<b>2022 - Present</b>	<b>Senior Member</b> , The Institute of Electrical and Electronics Engineers (IEEE)
<b>2012 - 2014</b>	<b>Maulana Azad National Fellowship (MANF)</b> was funded by the University Grant Commission, Govt. of India, to pursue a Ph.D. in 2012.
<b>2024</b>	<b>Best Paper Award</b> by Journal of Economy and Technology, Elsevier
<b>2022</b>	<b>Best Paper Award</b> , ICSSA-2022 Conference - Universiti Teknologi Malaysia (UTM) , Malaysia

## EDUCATIONAL PROFILE

<b>2014</b>	<b>Doctor of Philosophy (PhD) in Computer Science</b> Department of Computer Science, Aligarh Muslim University, Aligarh, India Thesis Title “ <b>Cryptanalysis and Design of Synchronous Stream Cipher</b> ” (Submitted in November 2013 and Awarded in April 2014)
<b>2009</b>	<b>Master of Computer Science &amp; Application (MCA)</b> Department of Computer Science, Aligarh Muslim University, Aligarh, India
<b>2005</b>	<b>BS (Hons.) Computer Application</b> Department of Computer Science, Aligarh Muslim University, Aligarh, India

**SPECIALIZATION & RESEARCH INTEREST:** Information Security, Blockchain, Internet of Things (IoT), Smart Healthcare, Machine Learning

## RESEARCH PROFILES LINKS

- Indexed in the Stanford University annual global rankings of the top 2% of scientists in the world (Compiled by Elsevier).  
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7>

- Google Scholar (Citations 2496, h-index 31 and i10-index 54)  
<https://scholar.google.com/citations?user=i-3dP-oAAAAJ&hl=en>
- Scopus Profile (Citations 1142, h-index 22)  
<https://www.scopus.com/authid/detail.uri?authorId=56659054100>
- Web of Science Profile (Citations 323, h-index 12)  
<https://www.webofscience.com/wos/author/record/AAK-7827-2021>
- Orcid Profile  
<https://orcid.org/0000-0003-0504-4515>
- Personal Web Page  
<https://www.jazanu.edu.sa/en/shadab-alam-nafis>

## SUMMARY OF RESEARCH PUBLICATIONS

PUBLICATIONS	RESEARCH PAPER DETAILS
<b>Patents</b>	<ul style="list-style-type: none"> <li>• 1 US Patent (Granted)</li> <li>• 2 US Patent (Published)</li> <li>• 2 Australian Patents (Granted)</li> <li>• 3 Indian Patents (Published)</li> </ul>
<b>Web of Science (WoS) Indexed Journals</b>	<ul style="list-style-type: none"> <li>• 31 Research Papers               <ul style="list-style-type: none"> <li>❖ 10 Q1 Publications</li> <li>❖ 13 Q2 Publications</li> <li>❖ 08 Q3 and Q4 Publications</li> </ul> </li> </ul>
<b>Scopus Indexed Journals</b>	<ul style="list-style-type: none"> <li>• 15 Research Papers</li> </ul>
<b>Conference Papers as Book Chapters</b>	<ul style="list-style-type: none"> <li>• 15 Research Papers (All Scopus Indexed)</li> </ul>
<b>Conference Proceedings</b>	<ul style="list-style-type: none"> <li>• 15 Research Papers (All Scopus Indexed)</li> </ul>
<b>Edited Books</b>	<ul style="list-style-type: none"> <li>• 1 Book Published (CRC Press)</li> <li>• 2 Books Ongoing (IGI Global)</li> </ul>

## SUBJECTS TAUGHT AT PG/UG LEVEL

- Computer Security & Privacy
- Cryptography
- Introduction to Cybersecurity
- Operating System
- Fundamentals of Information Security
- Introduction to Information System

- Database Management System
- Management Information Systems
- System Analysis and Design
- Information Systems Management
- Software Engineering

#### A. RESEARCH PROJECTS:

- Worked as a Co-PI in the Institutional Project titled **“A detailed review of blockchain-based applications for protection against pandemic like COVID-19”** by the Deanship of Scientific Research (DSR), Jazan University, 2019 **(Completed)**.
- Worked as a Co-PI in the Waeed Project titled **“Blockchain-Based Microgrid for Safe and Reliable Power Generation and Distribution”** Waeed research project funded by the Deanship of Scientific Research, Jazan University, Jazan, Saudi Arabia, under grant no W43-071, 2022 **(Completed)**.

#### B. PH.D. THESIS SUPERVISION:

- Mohammed Shuaib, **“Self-Sovereign Identity Framework for Blockchain-based Land Registry,”** Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia **(Awarded)** ranked #181 in QS World University Rankings
- Faheem Ahmad Reegu, **“Blockchain-Based Interoperable Electronic Health Record Framework,”** Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia **(Submitted)** ranked #181 in QS World University Rankings

#### C. PATENTS (Total 8)

1. **Emotion Recognition and Notification System**, US Patent (Published), **US Patent**, Patent No.: US 12,142,078B2, App. 17809428, 2022 **(Granted)**  
<https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/20220335752>
2. **Character and Symbol Recognition System for Vehicle Safety**, US Patent (Published), **US Patent** App. 17809443, 2022  
<https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/20220335739>
3. **LSM Luggage Trolleys: Intelligent Shopping Mall Luggage Trolleys**, US Patent (Published), **US Patent** App. 17164845, 2021  
<https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/20210179159>

4. **BSF-128: A New Synchronous Stream Cipher Design, Australian Patent (Granted)**, Patent number: 2021100435, 2021  
<https://ipsearch.ipaustralia.gov.au/patents/2021100435>
5. **A System and Method for Cyber Security Through Blockchain Technology, Australian Patent (Granted)**, Patent number: 2021105872, 2021  
<https://ipsearch.ipaustralia.gov.au/patents/2021105872>
6. **Identification and Classification of Phishing Website or Blog in Social Media Sites, Indian Patent** (Published), Application number 20224106371, 2022  
<https://ipindiaservices.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus>
7. **Asthma Detection and Notification Using IoT Based With Very Small Device, Indian Patent** (Published), Application number 202141004759, 2021  
<https://ipindiaservices.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus>
8. **IAH-Waste Management: Intelligent Waste Management For Ayurveda Hospitals Using IOT-Based, Indian Patent** (Published), Application number: 202141001290, 2021  
<https://ipindiaservices.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus>

#### **D. BOOKS (Total 01)**

1. **Applications of Machine Learning and Deep Learning on Biological Data**, Edited by Faheem Masoodi, Mohammad Quasim, Syed Bukhari, Sarvottam Dixit, **Shadab Alam**, 2023 by Auerbach Publications (CRC Press), ISBN 9781032214375. <https://doi.org/10.1201/9781003328780>

#### **E. PEER-REVIEWED JOURNALS (Total- 52)**

##### **I. WEB OF SCIENCE JOURNALS (Total - 31)**

- J1.** Gaurav Yadav, Mohammad Ubaidullah Bokhari, Saleh I. Alzahrani, **Shadab Alam** and Mohammed Shuaib “**Emotion-Aware Ensemble Learning (EAEL): Revolutionizing Mental Health Diagnosis of Corporate Professionals via Intelligent Integration of Multi-modal Data Sources and Ensemble Techniques**” IEEE Access. 2025 January.  
<https://doi.org/10.1109/ACCESS.2025.3529032> (SCIE Q2 IF-3.4 Web of Science)
- J2.** Reddy C KK, Kaza VS, Mohana RM, Alhameed M, Jeribi F, **Alam S**, Shuaib M. “**Detecting Anomalies in Smart Wearables for Hypertension: A Deep**

- Learning Mechanism.”** *Frontiers in Public Health*. 2025; 12:1426168. [doi: 10.3389/fpubh.2024.1426168](https://doi.org/10.3389/fpubh.2024.1426168) (SCIE Q2 IF-3.0 Web of Science)
- J3.** Mustaqeem M, Alam M, Mustajab S, Alshanketi F, **Alam S**, Shuaib M. **“Comprehensive Bibliographic Survey and Forward-looking Recommendations for Software Defect Prediction: Datasets, Validation Methodologies, Prediction Approaches, and Tools.”** *IEEE Access*. 2024 Dec 13. <https://doi.org/10.1109/ACCESS.2024.3517419> (SCIE Q2 IF-3.4 Web of Science)
- J4.** Kaza VS, Alamer A, **Alam S**, Shuaib M, Basudan S, Sheneamer A. **“Detecting and forecasting cryptojacking attack trends in Internet of Things and wireless sensor networks devices.”** *PeerJ Computer Science*. 2024 Nov 29;10:e2491. <https://doi.org/10.7717/peerj-cs.2491> (SCIE Q1 IF 3.8 Web of Science)
- J5.** Khan, Afreen, Swaleha Zubair, Mohammed Shuaib, Abdullah Sheneamer, **Shadab Alam**, and Basem Assiri, **“Development of a Robust Parallel and Multi-Composite Machine Learning Model for Improved Diagnosis of Alzheimer's Disease: Correlation with Dementia-Associated Drug Usage and AT (N) Protein Biomarkers.”** *Frontiers in Neuroscience*, 18, 1391465, 2024. [https://doi.org/ 10.3389/fnins.2024.1391465](https://doi.org/10.3389/fnins.2024.1391465) (SCIE Q2 IF-3.2 Web of Science)
- J6.** Reddy CK, Reddy PA, Janapati H, Assiri B, Shuaib M, **Alam S**, Sheneamer A. **“A fine-tuned vision transformer based enhanced multi-class brain tumor classification using MRI scan imagery”**, *Frontiers in Oncology*. 2024 Jul 18;14:1400341. <https://doi.org/10.3389/fonc.2024.1400341> (SCIE Q2 IF-3.5 Web of Science)
- J7.** Reddy C, Kishor Kumar, Aarti Rangarajan, Deepti Rangarajan, Mohammed Shuaib, Fathe Jeribi, and **Shadab Alam**, **“A Transfer Learning Approach: Early Prediction of Alzheimer’s Disease on US Healthy Aging Dataset.”** *Mathematics* 12, no. 14 (2024): 2204. <https://doi.org/10.3390/math12142204> (SCIE Q1 IF-2.3 Web of Science)
- J8.** Mustaqeem, Mohd, Suhel Mustajab, Mahfooz Alam, Fathe Jeribi, **Shadab Alam**, and Mohammed Shuaib. **“A trustworthy hybrid model for transparent software defect prediction: SPAM-XAI.”** *PloS one* 19, no. 7 (2024): e0307112. <https://doi.org/10.1371/journal.pone.0307112> (SCIE Q1 IF-3.7 Web of Science)
- J9.** Mohd Shams Tabarej, Sonajharia Minz, Anwar Ahamed Shaikh, Mohammed Shuaib, Fathe Jeribi, and **Shadab Alam**, **“Graph-Based Hotspot Detection of Socio-Economic Data Using Rough-Set”** *Mathematics* 12, no. 13, 2024. doi: <https://doi.org/10.3390/math12132031> (SCIE Q1 IF-2.3 Web of Science)

- J10.** Kishor K. Reddy, Advaita Daduvy, R. Madana Mohana, Basem Assiri, Mohammed Shuaib, **Shadab Alam**, and Abdullah Sheneamer. **“Enhancing Precision Agriculture and Land Cover Classification: A Self-Attention 3D Convolutional Neural Network Approach for Hyperspectral Image Analysis”** IEEE Access, 2024. doi: <https://doi.org/10.1109/ACCESS.2024.3420089> (SCIE Q2 IF-3.4 Web of Science)
- J11.** Vaneet Kumar, Aleem Ali, Payal Mittal, Ibrahim Aqeel, Mohammed Shuaib, **Shadab Alam**, and Mohammed Y. Aalsalem. **“E2SVM: Electricity-Efficient SLA-aware Virtual Machine Consolidation approach in cloud data centers”** Plos one 19, no. 6 (2024): e0303313. doi : <https://doi.org/10.1371/journal.pone.0303313> (SCIE Q1 IF-3.7 Web of Science)
- J12.** Wasim Khan, Mohammad Ishrat, Ahmad Neyaz Khan, Mohammad Arif, Anwar Ahamed Shaikh, Mousa Mohammed Khubrani, **Shadab Alam**, Mohammed Shuaib, and Rajan John. **“Detecting Anomalies in Attributed Networks through Sparse Canonical Correlation Analysis combined with Random Masking and Padding”** IEEE Access, vol. 12, pp. 65555-65569, 2024, doi: <https://doi.org/10.1109/ACCESS.2024.3398555> (SCIE Q2 IF-3.4 Web of Science)
- J13.** C. Kishor Kumar Reddy, Vijaya Sindhoori Kaza, P. R. Anisha, Mousa Mohammed Khubrani, Mohammed Shuaib, **Shadab Alam**, and Sadaf Ahmad. **“Optimising barrier placement for intrusion detection and prevention in WSNs”** Plos one 19, no. 2 (2024). <https://doi.org/10.1371/journal.pone.0299334> (SCIE Q1 IF-3.7 Web of Science)
- J14.** Mohammad Tabrez Quasim, Khair ul Nisa, Mohammad Zunnun Khan, Mohammad Shahid Husain, **Shadab Alam**, Mohammed Shuaib, Mohammad Meraj & Monir Abdullah **“An Internet of Things Enabled Machine Learning Model for Energy Theft Prevention System (ETPS) in Smart Cities”**, *Journal of Cloud Computing*, Springer Nature 12(158), 2023. <https://doi.org/10.1186/s13677-023-00525-4> (SCIE Q2 IF-4.4 Web of Science)
- J15.** Alam, Shadab. **“The Current State of Blockchain Consensus Mechanism: Issues and Future Works.”** *International Journal of Advanced Computer Science and Applications* 14(8), The Science and Information (SAI) Organization, 2023. <http://dx.doi.org/10.14569/IJACSA.2023.0140810> (ESCI IF 0.9 Web of Science)
- J16.** Mousa Mohammed Khubrani and Shadab Alam **“Blockchain-Based Microgrid for Safe and Reliable Power Generation and Distribution: A Case Study of Saudi Arabia,”** *Energies* MDPI, 2023. <https://doi.org/10.3390/en16165963> (SCIE Q3 IF-3.2 Web of Science)



- J17.** Nayef Alqahtani, Shadab Alam, Ibrahim Aqeel, Mohammed Shuaib, Ibrahim Mohsen Khormi, Surbhi Bhatia, Areej A. Malibari **“Deep Belief Networks (DBN) With IoT-Based Alzheimer’s Disease Detection and Classification”**, *Applied Sciences*, MDPI, 2023 <https://doi.org/10.3390/app13137833> (SCIE Q1 IF-2.5 Web of Science)
- J18.** Ibrahim Aqeel, Ibrahim Mohsen Khormi, Surbhi Bhatia, Mohammed Shuaib, Ahlam Almusharraf, **Shadab Alam**, Norah Alkhalidi **“Load Balancing using Artificial Intelligence for Cloud-Enabled Internet of Everything in Healthcare Domain”**, *Sensors* (MDPI), 2023. <https://doi.org/10.3390/s23115349> (SCIE Q2 IF-3.9 Web of Science)
- J19.** Qamar, S., Amaan, M., Rahman, M. I., Aqeel, I., Shuaib, M., Khormi, I. M., & Alam, S. **“Cloud data transmission based on security and improved routing through hybrid machine learning techniques”** *Soft Computing* (Springer Nature), 2023. <https://doi.org/10.1007/s00500-023-08417-0> (SCIE Q1 IF-4.1 Web of Science)
- J20.** **Alam, Shadab**, Omer K. Jasim Mohammad, Badria Sulaiman Alfurhood, R. Mahaveerakannan, and V. Savitha. **“Effective sound detection system in commercial car vehicles using Msp430 launchpad development.”** *Multimedia Tools and Applications*, Springer Nature, 2023. <https://doi.org/10.1007/s11042-023-15373-2> (SCIE Q1 IF-3.6 Web of Science)
- J21.** **Shadab Alam**, Surbhi Bhatia, Mohammed Shuaib, Mousa Mohammed Khubrani, Fayez Alfayez, Areej A. Malibari, and Sadaf Ahmad **“An Overview of Blockchain and IoT Integration for Secure and Reliable Health Records Monitoring”** *Sustainability*, 15(7): 5660. (MDPI), 2023. <https://doi.org/10.3390/su15075660> (SCIE Q2 IF-3.9 Web of Science)
- J22.** Mohammed Shuaib, Surbhi Bhatia, Shadab Alam, Raj Kumar Masih, Nashi Khalid Alqahtani, Shakila Basheer, Mohammad Shabbir Alam **“An Optimised Dynamic Efficient Load Balancing Framework for Resource Management in the Internet of Things (IoT) Environment”**, *Electronics*, 12(5), 1104; (MDPI), 2023. <https://doi.org/10.3390/electronics12051104> (SCIE Q3 IF-2.9 Web of Science)
- J23.** Alam, S.; Shuaib, M.; Ahmad, S.; Jayakody, D.N.K.; Muthanna, A.; Bharany, S.; Elgendy, I.A., **“Blockchain-Based Solutions Supporting Reliable Healthcare for Fog Computing and Internet of Medical Things (IoMT) Integration,”** *Sustainability* (MDPI), 2022, 14, 15312. <https://doi.org/10.3390/su142215312> (SCIE Q2 IF-3.9 Web of Science)
- J24.** Mohammad Khalid Imam Rahmani, Mohammed Shuaib, **Shadab Alam**, Shams Tabrez Siddiqui, Sadaf Ahmad, Surbhi Bhatia, Arwa Mashat, **“Blockchain-Based**



**Trust Management Framework for Cloud Computing-Based Internet of Medical Things (IoMT): A Systematic Review,”** Computational Intelligence and Neuroscience (Hindawi) vol. 2022, Article ID 9766844, 14 pages, 2022. <https://doi.org/10.1155/2022/9766844> (SCIE Q2 IF-3.120 Web of Science)

- J25. Mohammed Shuaib, **Shadab Alam**, R.Ahmed, S Qamar, Mohammed Shahnawaz Nasir, Shabbir Alam, **“Current status, requirements, and challenges of Blockchain application in Land registry,”** *International Journal of Information Retrieval Research (IJIRR)* 12(2), IGI Global (2022) <https://doi.org/10.4018/IJIRR.299934> (IF-1.1 ESCI Web of science)
- J26. Mohammed Shuaib, Hafizah Hassan, Sahnius Usman, **Shadab Alam**, Surbhi Bhatia, Parul Agarwal, Sheikh Mohammad Idrees **“Land Registry Framework based on Self-Sovereign Identity (SSI) for Environmental Sustainability,”** Sustainability, 14.9 (2022): 5400. MDPI <https://doi.org/10.3390/su14095400> (SCIE Q2 IF-3.9 Web of Science)
- J27. Mohammed Shuaib, Noor Hafizah Hassan, Sahnius Usman, **Shadab Alam**, Surbhi Bhatia, Arwa Mashat, Adarsh Kumar, Manoj Kumar, **“Self-Sovereign Identity Solution for Blockchain-Based Land Registry System: A Comparison,”** Mobile Information Systems, vol. 2022, 2022. <https://doi.org/10.1155/2022/8930472> (SCIE Q4 IF-1.8 Web of Science)
- J28. Shuaib, M., Hafizah Hassan, N., Usman, S., **Alam, S.**, Bhatia, S., Koundal, D., & Belay, A. (2022). **“Identity Model for Blockchain-Based Land Registry System: A Comparison”** *Wireless Communications and Mobile Computing*, Hindawi (2022). <https://doi.org/10.1155/2022/5670714> (SCIE Q3 IF-2.14 Web of Science)
- J29. Bhatia, S., **Alam, S.**, Shuaib, M., Hameed Alhameed, M., Jeribi, F., & Alsuwailam, R. I. **“Retinal Vessel Extraction Via Assisted Multi-Channel Feature Map and U-net”** *Frontiers in Public Health* (2022). DOI: <https://doi.org/10.3389/fpubh.2022.858327> (SCIE Q2 IF-3.0 Web of Science)
- J30. Aslam, T., Maqbool, A., Akhtar, M., Mirza, A., Khan, M. A., **Alam, Shadab.** **“Blockchain-Based Enhanced ERP Transaction Integrity Architecture and PoET Consensus,”** *CMC-Computers, Materials & Continua*, 70(1), 1089–1109,(2021). [doi:10.32604/cmc.2022.019416](https://doi.org/10.32604/cmc.2022.019416) (SCIE Q2 IF-2.1 Web of Science)
- J31. **Shadab Alam.**, Mohammed Shuaib, M., Khan, W. Z., Garg, S., Kaddoum, G., Hossain, M. S., & Zikria, Y. B., **“Blockchain-based Initiatives: Current state and challenges,”** *Computer Networks*, 198, 108395 (2021). DOI: <https://doi.org/10.1016/j.comnet.2021.108395>, (SCIE Q1 IF-5.6 Web of Science)

## II. SCOPUS & OTHERS JOURNALS (Total 21)

- J1.** Hakim, Tahir, Aidi Ahmi, and **Shadab Alam**. "A Decade in Blockchain: A Bibliometric Reflection on the Growth and Interdisciplinary Reach of a Disruptive Technology." *Journal of Information and Communication Technology* 23.4 (2024): 627-665. <https://doi.org/10.32890/jict2024.23.4.3> (SCOPUS)
- J2.** Chinthala, Kishor Kumar Reddy, Monika Singh Thakur, Mohammed Shuaib, and **Shadab Alam** "Prospects of Computational Intelligence in Society: Human-Centric Solutions, Challenges, and Research Areas." *Journal of Computational and Cognitive Engineering* (2024). <https://doi.org/10.47852/bonviewJCCE42023330> (SCOPUS)
- J3.** Kishor K. Reddy, Rithika Badam, **Shadab Alam**, and Mohammed Shuaib. "IoT-Driven Accessibility: A Refreshable OCR-Braille Solution for Visually Impaired and Deaf-Blind Users through WSN" *Journal of Economy and Technology* (2024). <https://doi.org/10.1016/j.ject.2024.04.007> (SCOPUS)
- J4.** Arif, Mohd, Malabika Adak, Anjum Ara Ahmad, Chhaya Nayak, Ibrahim Aqeel, **Shadab Alam**, Dyuti Banerjee, And Ayasha Siddiqua. "Energy Optimisation Approach Based Machine Learning on Linear Reflector Systems" *Journal of Theoretical and Applied Information Technology* 102, no. 6 (2024). (SCOPUS)
- J5.** Emmanuel, A. A., Awokola, J. A., **Alam, S.**, Bharany, S., Agboola, P., Shuaib, M., & Ahmed, R. "A Hybrid Framework of Blockchain and IoT Technology in the Pharmaceutical Industry: A Comprehensive Study," *Mobile Information Systems*, Hindawi, 2023. <https://doi.org/10.1155/2023/3265310> (SCOPUS)
- J6.** Mohammed Shuaib, **Shadab Alam**, Mohammad Shabbir Alam, Mohammad Shahnawaz Nasir, "Self-sovereign identity for healthcare using blockchain," *Materials Today: Proceedings*, Elsevier, Volume 81(2), 2023, ISSN 2214-7853 <https://doi.org/10.1016/j.matpr.2021.03.083> (SCOPUS)
- J7.** Mousa Mohammed Khubrani, **Shadab Alam** "A detailed review of Blockchain-based applications for protection against pandemic like COVID-19", *TELKOMNIKA Telecommunication, Computing, Electronics and Control*, Vol 19, No 4, August 2021 <http://dx.doi.org/10.12928/telkomnika.v19i4.18465> (SCOPUS)
- J8.** Reegu, Faheem Ahmad, Salwani Mohd, Zaid Hakami, Kaiser Kariem Reegu, and **Shadab Alam**. "Towards Trustworthiness of Electronic Health Record System using Blockchain." *Annals of the Romanian Society for Cell Biology* 25, no. 6 (2021): 2425-2434. Retrieved from <https://www.annalsofrscb.ro/index.php/journal/article/view/5858> (SCOPUS)
- J9.** **Alam, Shadab**. et al. "A Blockchain-based framework for secure Educational Credentials." *Turkish Journal of Computer and Mathematics Education*

(TURCOMAT) 12.10 (2021): 5157-5167.  
<https://doi.org/10.17762/turcomat.v12i10.5298> (SCOPUS)

- J10.** Z.A. Khan, Mousa Mohammed Khubrani, **Shadab Alam**, S.J. Hui, Y. Wang, “**Method for Measuring the Similarity of Multiple Metrological Sequences in the Key Phenological Phase of Rice-based on Dynamic Time**,” *Alinteri Journal of Agriculture Science*, Volume 36, Issue 2, Pages: 22-37, 2021, DOI: <https://doi.org/10.47059/alinteri/v36i2/ajas21112>
- J11.** Reegu, Faheem, Salwani Mohd Daud, and **Shadab Alam**. “**Interoperability Challenges in Healthcare Blockchain System-A Systematic Review**.” *Annals of the Romanian Society for Cell Biology* (2021): 15487-15499, Volume 25: Issue 4 Retrieved from <https://www.annalsofrscb.ro/index.php/journal/article/view/5177> (SCOPUS)
- J12.** Shuaib, Mohammed, Salwani Mohd Daud, and **Shadab Alam**. “**Self-sovereign Identity framework development in compliance with Self-sovereign Identity principles using components**.” *International Journal of Modern Agriculture* 10.2 (2021): 3277-3296. Retrieved from <http://www.modern-journals.com/index.php/ijma/article/view/1155>
- J13.** Ibrahim AlShourbaji, Ghassan Samara, Hussam Abu Munshar, Waleed A Zogaan, Faheem A Reegu, **Shadab Alam**, Muhammad Saidu Aliero, “**Early detection of skin cancer using deep learning approach**” *İlköğretim Online (IOO) - Elementary Education Online (EEO)*, Vol 20, No 5, Mar 2021, pp 3880–3884 (SCOPUS)
- J14.** Faheem A. Reegu, Maher O. Al-Khateeb, Waleed A. Zogaan, Mohammad R. Al-Mousa, **Shadab Alam**, Ibrahim Al-Shourbaj, “**Blockchain-Based Framework for Interoperable Electronic Health Record**,” *Annals of the Romanian Society for Cell Biology*, 6486–6495. Volume 25: Issue 3(2021). Retrieved from <https://www.annalsofrscb.ro/index.php/journal/article/view/2166> (SCOPUS)
- J15.** Shuaib, Mohammed, Salwani Mohd Daud, **Shadab Alam**, and Wazir Zada Khan. “**Blockchain-based framework for secure and reliable land registry system**.” *Telkomnika* 18, no. 5 (2020). <http://dx.doi.org/10.12928/telkomnika.v18i5.15787> (SCOPUS)
- J16.** Ashok Kumar Gupta, Shams Tabrez Siddiqui, **Shadab Alam**, and Mohammad Shuaib, “**Cloud Computing Security using Blockchain**,” *International Journal of Emerging Technologies and Innovative Research (JETIR)*, June 2019, Volume 6, Issue 6, ISSN - 2349-5162 <http://doi.org/10.1729/Journal.34624>
- J17.** Faheem Masoodi, **Shadab Alam** and Shams Tabrez Siddiqui, “**Security & Privacy Threats, Attacks and Countermeasures in the Internet of Things**,”

- J18.** *Alam, Shadab and Bokhari, M. U.* “**A Detailed Analysis of Grain Family of Stream Ciphers**” in International Journal of Computer Network and Information Security (IJCNIS), MECS Publisher, Hong Kong. ISSN: 2074-9090 (Print), ISSN: 2074-9104 (Online) DOI: [10.5815/ijcnis.2014.06.05](https://doi.org/10.5815/ijcnis.2014.06.05) (SCOPUS)
- J19.** *Bokhari, M. U., Alam, Shadab and Masoodi, Faheem* “**Cryptanalysis Techniques for Stream Cipher: A Survey**” in International Journal of Computer Applications (IJCA), USA, Volume 60, Number 9 (ISBN No- 973-93-80871-89-1), December 2012. DOI: [10.5120/9721-4187](https://doi.org/10.5120/9721-4187)
- J20.** *Bokhari, M. U., Masoodi, Faheem and Alam, Shadab* “**An Analysis of Linear Feedback Shift Registers in Stream Ciphers**” in International Journal of Computer Applications (IJCA), USA (Volume 46/Number 17, ISBN No- 973-93-80868-61-8), May 2012. DOI: [10.5120/7013-9714](https://doi.org/10.5120/7013-9714)
- J21.** *Bokhari, M. U., Alam, Shadab and Masoodi, Faheem S.* “**SOBER Family of Stream Ciphers: A Review,**” in International Journal of Computer Applications (IJCA), USA, (Volume 23/Number 1, ISBN No- 978-93-80752-75-1), 2011. DOI: [10.5120/2857-3672](https://doi.org/10.5120/2857-3672)

## **F. CONFERENCE PUBLICATIONS**

### **I. FULL PAPERS PUBLISHED AS BOOK CHAPTERS (Total- 10)**

- B 1.** Abhishek Bajpai; Vivek Srivastava; Mohammed Shuaib; Aishwarya Jaiswal; Salil Bharany; **Shadab Alam**; Sadaf Ahmad, “**An Efficient Hybrid Model to Summarize the Text Using Transfer Learning,**” In: J. Agrawal et al. (eds) *Data Engineering and Applications*, Lecture Notes in Electrical Engineering 1146, Springer, Singapore. September 2024. [https://doi.org/10.1007/978-981-97-0037-0\\_5](https://doi.org/10.1007/978-981-97-0037-0_5), ISBN: 978-981-97-0036-3
- B 2.** Amita Bisht, Diksha Dhiman, Raj Kumar Masih, Kapil Joshi, Salil Bharany, **Shadab Alam**, and Mohammed Shuaib, “**Approaches for Sentiment Analysis on IMDB Movie Reviews**”, In: J. Agrawal et al. (eds) *Data Engineering and Applications*, Lecture Notes in Electrical Engineering 1146, Springer, Singapore. September 2024. [https://doi.org/10.1007/978-981-97-0037-0\\_32](https://doi.org/10.1007/978-981-97-0037-0_32) , ISBN: 978-981-97-0036-3
- B 3.** Salil Bharany, **Shadab Alam**, Mohammed, Shuaib, Bhanu Talwar, “**Sentiment Analysis of Twitter Data for COVID-19 Posts**”, In: Jacob, I.J., Kolandapalayam

Shanmugam, S., Izonin, I. (eds) *Data Intelligence and Cognitive Informatics, Algorithms for Intelligent Systems*, Springer, Singapore. December 2022. [https://doi.org/10.1007/978-981-19-6004-8\\_37](https://doi.org/10.1007/978-981-19-6004-8_37) , ISBN: 978-981-19-6004-8

- B 4.** Mohammed Shuaib, **Shadab Alam**, and Salwani Mohd Daud, “**Improving the Authenticity of Real Estate Land Transaction Data Using Blockchain-Based Security Scheme**,” In: Anbar, M., Abdullah, N., Manickam, S. (eds) **Advances in Cyber Security ACeS 2020**, Communications in Computer and Information Science, vol 1347. Springer, Singapore, February 2021. [https://doi.org/10.1007/978-981-33-6835-4\\_1](https://doi.org/10.1007/978-981-33-6835-4_1) , ISBN: 978-981-33-6835-4
- B 5.** S.T. Siddiqui, R. Ahmad, M. Shuaib, **S. Alam**, “**Blockchain Security Threats, Attacks and Countermeasures**” In: Hu, YC., Tiwari, S., Trivedi, M., Mishra, K. (eds) *Ambient Communications and Computer Systems. Advances in Intelligent Systems and Computing*, vol 1097. Springer, Singapore, March 2020. [https://doi.org/10.1007/978-981-15-1518-7\\_5](https://doi.org/10.1007/978-981-15-1518-7_5) , ISBN: 978-981-15-1518-7
- B 6.** S.T. Siddiqui, **S. Alam**, R. Ahmad, M. Shuaib, “**Security Threats, Attacks, and Possible Countermeasures in the Internet of Things**,” In: Kolhe, M., Tiwari, S., Trivedi, M., Mishra, K. (eds) *Advances in Data and Information Sciences. Lecture Notes in Networks and Systems*, vol 94. Springer, Singapore, January 2020. [https://doi.org/10.1007/978-981-15-0694-9\\_5](https://doi.org/10.1007/978-981-15-0694-9_5) , ISBN: 978-981-15-0694-9
- B 7.** **S. Alam**, S.T. Siddiqui, A. Ahmad, R. Ahmad, M. Shuaib, “**Internet of Things (IoT) Enabling Technologies, Requirements, and Security Challenges**,” In: Kolhe M., Tiwari S., Trivedi M., Mishra K. (eds), *Advances in Data and Information Sciences, Lecture Notes in Networks and Systems*, vol 94. Springer, Singapore, January 2020. [https://doi.org/10.1007/978-981-15-0694-9\\_12](https://doi.org/10.1007/978-981-15-0694-9_12) , ISBN: 978-981-15-0694-9
- B 8.** Mohammed Shuaib, Abdus Samad, **Shadab Alam** and Shams Tabrez Siddiqui, “**Why Adopting Cloud still a Challenge? - A Review on Issues and Challenges for Cloud Migration in Organizations**”, In: Hu, YC., Tiwari, S., Mishra, K., Trivedi, M. (eds) *Ambient Communications and Computer Systems, Advances in Intelligent Systems and Computing*, vol 904. Springer, Singapore, March 2019. [https://doi.org/10.1007/978-981-13-5934-7\\_35](https://doi.org/10.1007/978-981-13-5934-7_35) , ISBN: 978-981-13-5934-7
- B 9.** Shams Tabrez Siddiqui, **Shadab Alam**, Zaki Khan, and Ashok Gupta Gupta, “**Cloud-Based E-Learning: Using Cloud Computing Platform for an Effective E-Learning**,” In: Tiwari, S., Trivedi, M., Mishra, K., Misra, A., Kumar, K. (eds) *Smart Innovations in Communication and Computational Sciences, Advances in Intelligent Systems and Computing*, vol 851. Springer, Singapore, November 2018. [https://doi.org/10.1007/978-981-13-2414-7\\_31](https://doi.org/10.1007/978-981-13-2414-7_31) , ISBN: 978-981-13-2414-7

- B 10.** Shadab Alam, Mohammed Shuaib, Abdus Samad, “**Collaborative Study of Intrusion Detection and Intrusion Prevention Techniques in Cloud Computing**,” In: Bhattacharyya, S., Hassanien, A., Gupta, D., Khanna, A., Pan, I. (eds) International Conference on Innovative Computing and Communications. Lecture Notes in Networks and Systems, vol 55. Springer, Singapore, November 2018. [https://doi.org/10.1007/978-981-13-2324-9\\_23](https://doi.org/10.1007/978-981-13-2324-9_23) , ISBN: 978-981-13-2324-9

## **II. FULL PAPERS IN CONFERENCE PROCEEDINGS (Total - 24)**

- C 1.** R. Ango, R. K. Masih, C. K. K. Reddy, M. Shuaib, M. S. T and **S. Alam**, "Fraud Detection in Banking using the Kaggle Credit Card Dataset and XGBoost Model," 2024 *International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS)*, Bengaluru, India, 2024, pp. 968-973, doi: <https://doi.org/10.1109/ICICNIS64247.2024.10823227>
- C 2.** S. Tabassum, C. B. Kotnala, R. K. Masih, M. Shuaib, **S. Alam**, and T. M. Alar, “**Performance Analysis of Machine Learning Techniques for Predicting Water Quality Index using Physiochemical Parameters**,” 2023 *International Conference on Sustainable Computing and Smart Systems (ICSCSS)*, Hindusthan College of Engineering and Technology (HiCET) Coimbatore, India, 2023, pp. 372-377, doi: [10.1109/ICSCSS57650.2023.10169408](https://doi.org/10.1109/ICSCSS57650.2023.10169408)
- C 3.** T. M. Alar, M. Shuaib, I. M. Khormi, **S. Alam**, I. Aqeel and S. Ahmad, “**Enhancing the Trust and Transparency of Academic Records with Blockchain-Based Systems**,” 2023 International Conference in Advances in Power, Signal, and Information Technology (APSIT), Department of Electrical & Electronics Engineering, Institute of Technical Education & Research, Faculty of Engineering & Technology, Siksha ‘O’ Anusandhan Deemed to be University, Bhubaneswar, Odisha, India, 2023, pp. 1-7, doi: [10.1109/APSIT58554.2023.10201683](https://doi.org/10.1109/APSIT58554.2023.10201683).
- C 4.** R. Masih, **S. Alam**, S. Tabassum, M. Shuaib and S. Ahmad, “**An Analysis of the Significant Role Played by Mobile Cloud Forensics and its Key Obstacles**,” 2023 *International Conference in Advances in Power, Signal, and Information Technology (APSIT)*, Bhubaneswar, India, 2023, pp. 578-582, doi: [10.1109/APSIT58554.2023.10201715](https://doi.org/10.1109/APSIT58554.2023.10201715)
- C 5.** **Shadab Alam** “**Security Concerns in Smart Agriculture and Blockchain-based Solution**,” IEEE OPJU International Technology Conference on Emerging Technologies for Sustainable Development (8-10 Feb 2023) at O.P. Jindal University, Raigarh, Chhattisgarh, India. [10.1109/OTCON56053.2023.10113953](https://doi.org/10.1109/OTCON56053.2023.10113953)
- C 6.** Madhu Kirola, Minakshi Memoria, Mohammed Shuaib, Kapil Joshi, **Shadab Alam** and Faisal Alshanketi “**A Referenced Framework on New Challenges and**



- Cutting-Edge Research Trends for Big-Data Processing Using Machine Learning Approaches,”** IEEE International Conference on Smart Computing And Application (ICSCA 2023), College Of Computer Science And Engineering, University of Ha'il, Ha'il, Saudi Arabia, 5-6 February 2023. [10.1109/ICSCA57840.2023.10087686](https://doi.org/10.1109/ICSCA57840.2023.10087686)
- C 7. Singh, Ajay, Kapil Joshi, **Shadab Alam**, Salil Bharany, Mohammed Shuaib, and Sadaf Ahmad. **“Internet of Things-based Integrated Remote Electronic Health Surveillance and Alert System: A Review,”** IEEE International Conference on Current Development in Engineering and Technology (CCET), IEEE, SAGE University, Bhopal, 23-24 December 2022. [10.1109/CCET56606.2022.10080629](https://doi.org/10.1109/CCET56606.2022.10080629)
- C 8. Ajay Singh; Kapil Joshi; Mohammed Shuaib; Salil Bharany; Shadab Alam; Sadaf Ahmad **“Navigation and Speed Regulation Aimed at Travel through Immersive Virtual Environments: A Review,”** IEEE International Conference on Current Development in Engineering and Technology (CCET-2022), 23-24 December at SAGE University Bhopal Madhya Pradesh, India. [10.1109/CCET56606.2022.10080751](https://doi.org/10.1109/CCET56606.2022.10080751)
- C 9. Palak Gupta, Anmol Varshney, Mohammad Rafeeq Khan, Rafeeq Ahmed, Mohammed Shuaib, and Shadab Alam **“Unbalanced Credit Card Fraud Detection Data: A Machine Learning-Oriented Comparative Study of Balancing Techniques,”** ICMLDE-2022 (International Conference on Machine Learning and Data Engineering), 07-08 September 2022 at UPES, Dehradun, India. <https://doi.org/10.1016/j.procs.2023.01.231>
- C 10. M. Shuaib, N. H. Hassan, S. Usman, **S. Alam**, S. M. Sam and G. A. L. N. Samy, **“Effect of Quantum computing on Blockchain-based Electronic Health Record Systems,”** 2022 4th International Conference on Smart Sensors and Application (ICSSA), Razak Faculty of Technology and Informatics (RFTI), Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia, 26-28 July 2022, pp. 179-184, DOI: [10.1109/ICSSA54161.2022.9870964](https://doi.org/10.1109/ICSSA54161.2022.9870964).
- C 11. M. Shuaib, N. H. Hassan, S. Usman, **S. Alam**, N. A. A. Bakar and N. Maarop, **“Performance Evaluation of DLT systems based on Hyper ledger Fabric,”** 2022 4th International Conference on Smart Sensors and Application (ICSSA), Razak Faculty of Technology and Informatics (RFTI), Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia, 26-28 July 2022, pp. 70-75, DOI: [10.1109/ICSSA54161.2022.9870957](https://doi.org/10.1109/ICSSA54161.2022.9870957).
- C 12. Mohammed Shuaib, **Shadab Alam**, and Faheem Ahmad Reegu, **“Blockchain-Based Self-Sovereign Identity For Covid-19 Medical Passports And Immunity Certificates”**, Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies ‘ICETMCCT 2021’ Pottalkulam,



India, from 09th December, 2021, to 10th December, 2021. DOI: <https://doi.org/10.1063/5.0150394>

- C 13. Shams Tabrez Siddiqui, Mohammed Fakhreldin and **Shadab Alam**, “**Blockchain Technology for IoT based Educational Framework and Credentials**”, 2021 *International Conference on Software Engineering & Computer Systems and 4th International Conference on Computational Science and Information Management (ICSECS-ICOCSIM)*, IEEE, Faculty of Computing, Universiti Malaysia Pahang, Malaysia, Aug 24-26, 2021, DOI: [10.1109/ICSECS52883.2021.00042](https://doi.org/10.1109/ICSECS52883.2021.00042)
- C 14. Faheem Ahmad Reegu, Salwani Mohd Daud, **Shadab Alam**, Mohammed Shuaib. “**Blockchain-based Electronic Health Record System for Efficient Covid-19 Pandemic Management.**” (2021). *2nd International Conference on Universal Wellbeing (ICUW 2020)*, 114-120
- C 15. Shams Tabrez Siddiqui, Mohammed Shuaib, **Shadab Alam** and Ashok Gupta, “**Implementing Blockchain Technology: Way to Avoid Evasive Threats to Information Security on Cloud**”, 2020-International Conference on Computing and Information Technology, September 9-10, 2020 at the University of Tabuk, Saudi Arabia. doi: [10.1109/ICCIT-144147971.2020.9213798](https://doi.org/10.1109/ICCIT-144147971.2020.9213798)
- C 16. Mohammed Shuaib, **Shadab Alam**, Salwani Mohd Daud and Sadaf Ahmad, “**Blockchain-based Initiatives in Social Security**”, 2nd International Conference on ICT for Digital, Smart, and Sustainable Development (ICIDSSD '20), Jamia Hamdard University, New Delhi, India, February 27-28, 2020. [http://dx.doi.org/10.4108/eai.27-2-2020.2303256](https://dx.doi.org/10.4108/eai.27-2-2020.2303256)
- C 17. *Alam, Shadab et al.* l “**Internet of vehicles (IoV) requirements, attacks and countermeasures**”, in proceedings of 5th Annual Conference on Computing for Sustainable Global Development; INDIACom-2018; IEEE Conference, 14th - 16th March 2018, Bharati Vidyapeeth, New Delhi, India. <http://bvica.com.in/INDIACom/news/INDIACom%202018%20Proceedings/Main/papers/1310.pdf>
- C 18. *Alam, Shadab; Siddiqui, Shams and Ahmad, Sadaf* “**Cloud Computing based E-Learning System**” in Proceedings of International Seminar On Contemporary Issues and Challenges, Murshidabad, India, February 2017.
- C 19. *Alam, Shadab and Bokhari, M. U.* “**Analysis and Design of New Synchronous Stream Cipher Design BSF-128**” in proceedings of “Wilkes - International Conference on Computing Sciences (ICCS)”, 2013 at Lovely Professional University in association with the International Neural Network Society and Advanced Computing Research Society at LPU, Punjab, 15-16 Nov 2013, Published by Elsevier. [ISBN: 978-93-5107-172-3](https://doi.org/10.1016/B978-93-5107-172-3), pp 369-375.

- C 20.** *Alam, Shadab and Bokhari, M. U.* “**BSF-128: A New Stream Cipher Design**” in Proceedings of International Conference IETET, 2013, at Geeta Institute of Technology, Kurukshetra, in association with Association of Computer Electronics and Electrical Engineers, Published by IDES, USA. [DOI:03.AETS.2013.3.F8](#), ISBN: 978- 1-63439-120-7, pp 541-545
- C 21.** *Bokhari, M. U., Ahmad, Iqrar and Alam, Shadab* “**Comparative Study of Techniques and Attacks on NLFSR Based Stream Ciphers– A Review**” Proceedings of the 6th National Conference; INDIACom-2012, 23rd – 24th February 2012 Bharati Vidyapeeth’s Institute of Computer Applications and Management, New Delhi, ISSN 0973-7529; [ISBN 978-93-80544-03-8](#)
- C 22.** *Bokhari, M. U., Alam, Shadab and Masoodi, Faheem S.* “**A Review of Py (Roo) Stream Cipher and Its Variants**” in 5th National Conference INDIACom -2011 on “Computing for Nation Development”, New Delhi 10th - 11th March 2011, Volume5, [ISBN 978-93-80544-00-7](#), pp 203-206.
- C 23.** *Bokhari, M. U. Ahmad, Sadaf Alam, Shadab and Masoodi, Faheem S.* “**Modern Tools and Technologies for Interactive Learning**” in 5th National Conference: INDIACom -2011 on “Computing for Nation Development”, New Delhi 10th - 11th March 2011, Volume5, [ISBN 978-93-80544-00-7](#), pp 078-082.
- C 24.** *Bokhari, M. U., Alam, Shadab and Masoodi, Faheem S.* “**Comparative Analysis of Py (Roo) family of Stream Ciphers**” in “International Conference on Reliability, Infocom Technology and Optimization (ICRITO 2010)” Volume1, [ISBN No - 978-81- 909732-2-9](#) held at Lingaya’s University, Faridabad, Nov 1-3, 2010, pp667-671.

### **III. PAPERS PRESENTED IN CONFERENCES/SEMINARS:**

- P 1.** Presented a paper titled “**Internet of Things based Secure and Reliable Remote Patient Monitoring: Advancements, Challenges, and Future Directions**”, 2nd IEEE International Interdisciplinary Humanitarian Conference for Sustainability (IIHC-2023)” held on 3rd & 4th Nov 2023 organized by Sri Venkateshwara College of Engineering, Bengaluru.
- P 2.** Presented a paper titled “**Developing Machine Learning Models for the Identification of Freshwater Macroinvertebrates Based on Water Quality and Macroinvertebrate Data**”, 2nd IEEE International Interdisciplinary Humanitarian Conference for Sustainability (IIHC-2023)” held on 3rd & 4th Nov 2023 organized by Sri Venkateshwara College of Engineering, Bengaluru.
- P 3.** Presented a paper titled “**Security Concerns in Smart Agriculture and Blockchain-based Solution,**” IEEE OPJU International Technology Conference on

Emerging Technologies for Sustainable Development (8-10 Feb 2023) at O.P. Jindal University, Raigarh, Chhattisgarh, India.

- P 4.** Presented a paper titled **“A Referenced Framework for Big-Data Processing Using Machine Learning Approaches: with Study on New Challenges and Cutting-Edge Research Trends”**, IEEE International Conference on Smart Computing and Application (ICSCA 2023), College of Computer Science And Engineering, University of Ha'il, Ha'il, Saudi Arabia, 5-6 February 2023.
- P 5.** Presented a paper titled **“Blockchain-Based Self-Sovereign Identity for Covid-19 Medical Passports And Immunity Certificates”**, Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies ‘ICETMCCT 2021’ Pottalkulam, India, from 09th December 2021 to 10th December 2021.
- P 6.** Presented a paper titled **“Blockchain Technology for IoT based Educational Framework and Credentials”**, 7<sup>th</sup> International Conference on Software Engineering & Computer Systems (ICSECS-2021), ICSECS-ICOCSIM 2021, IEEE, Phang, Malaysia, Aug 24-26, 2021.
- P 7.** Presented a paper titled **“Blockchain-based Electronic Health Record System for Efficient Covid-19 Pandemic Management.”** 2nd International Conference on Universal Wellbeing (ICUW 2020), December 12, organized by Perkumpulan Akademisi dan Saintis Indonesia (ASASI), Indonesia, 2020.
- P 8.** Presented a paper titled **“Improving the Authenticity of Real Estate Land Transaction Data Using Blockchain-Based Security Scheme.”** 2<sup>nd</sup> International Conference on Advances in Cyber Security (ACeS 2020), 8-9 December; Penang, Malaysia. Springer, Singapore, 2020.
- P 9.** Presented a paper titled **“Implementing Blockchain Technology: Way to Avoid Evasive Threats to Information Security on Cloud”**, 2020-International Conference on Computing and Information Technology at the University of Tabuk, KSA, September 9-10, 2020.
- P 10.** Presented a paper titled **“Analysis and Design of New Synchronous Stream Cipher Design BSF-128”** in “Wilkes - International Conference on Computing Sciences (ICCS)”, Lovely Professional University, in association with the International Neural Network Society and Advanced Computing Research Society at LPU, Punjab, 15-16 Nov 2013.
- P 11.** Presented a paper titled **“BSF-128: A New Stream Cipher Design”** in the International Conference IETET, 2013, at Geeta Institute of Technology, Kurukshetra, with the Association of Computer Electronics and Electrical Engineers, 25-27 October 2013.

- P 12.** Presented a paper titled “**A Review of Py (Roo) Stream Cipher and Its Variants**” in 5th National Conference INDIACom -2011 on “Computing for Nation Development,” New Delhi 10th - 11th March 2011
- P 13.** Presented a paper titled “**Modern Tools and Technologies for Interactive Learning**” at the 5th National Conference: INDIACom -2011 on “Computing for Nation Development”, New Delhi 10th - 11th March 2011.
- P 14.** Presented a paper titled “**Security: A Primary Case of E-Learning**” at the International Conference on “Teacher Education in Global Perspective” at Daudhar, Distt. Moga, Punjab, March 25, 2010.
- P 15.** Presented a paper titled “**Comparative Analysis of Py (Roo) family of Stream Ciphers**” in “International Conference on Reliability, Infocom Technology and Optimization (ICRITO 2010)” held at Lingaya’s University, Faridabad, Nov 1-3, 2010.
- P 16.** Presented a paper titled “**Cryptography: Modern Tools for Secure Communication**” in “Seminar of Multifarious Specialties,” organized by the Maqbool Social Health and Education Society, Aligarh, 30th November 2010.

## **G. PROFESSIONAL ACTIVITIES:**

### **I. EDITORIAL BOARD MEMBER OF JOURNALS**

- **Academic Editor**, *PLOS ONE*, ISSN: 1932-6203, PLOS Publisher
- **Academic Editor**, *Computational and Mathematical Methods*, John Wiley & Sons, Inc collaboration ISSN: 2577-7408 (Online)
- **Academic Editor**, *Security and Communication Networks*, John Wiley & Sons, Inc collaboration ISSN: 1939-0114 (Online)
- **Academic Editor**, *Journal of Computational and Cognitive Engineering (JCCE)*, BON VIEW PUBLISHING PTE. LTD, Singapore ISSN: 2810-9503 (Online)
- **Academic Editor**, Iraqi Journal of Information and Technology Systems (IJITS) at the information technology research and development centre (ITRDC)-university of Kufa.
- **Guest Editor**, *Sustainable Computing: Informatics and Systems (SUSCOM)*, ELSEVIER, ISSN: 2210-5387, special issue on Sustainable Urban Planning with IoT and Blockchain Integration: Pioneering Smart and Eco-friendly Urban

## Environments

- **Guest Editor**, *International Journal of Information Retrieval Research (IJIRR)*, IGI Global, ISSN: 2155-6377, special issue on Information Retrieval Method and Information Computing with Blockchain: Applications and Open Innovations
- **Guest Editor**, *Computer Systems Science and Engineering*, Tech Science Press, ISSN: 0267-6192 (Print) special issue on Advanced Artificial Intelligence and Machine Learning in Electronic Healthcare
- **Topic Editors (Guest Editor)**, *Frontiers in Computer Science*, Frontiers Media, E-ISSN: 2624-9898, Research Topic “Blockchain applications in Healthcare and drug discovery: Current state and future trends.”
- **Topic Editors (Guest Editor)**, *Frontiers in Communications and Networks*, Frontiers Media, E-ISSN: 2673-530X, Research Topic “Blockchain for wearable devices and implications in healthcare.”
- **Guest Associate Editor**, *Wearable Electronics*, Frontiers Media
- **Guest Associate Editor**, *Security, Privacy and Authentication*, Frontiers Media
- **Guest Associate Editor**, *Networks and Communications*, Frontiers Media

## II. REVIEWERS OF JOURNALS/BOOK CHAPTERS/CONFERENCES

- IEEE Journal of Biomedical and Health Informatics (ISSN 2168-2194), IEEE
- IEEE Access (ISSN: 2169-3536), IEEE
- Sustainable computing (ISSN: 2210-5379), Elsevier
- ACM Transactions on Internet Technology (ISSN:1533-5399, 1557-6051), ACM
- Soft Computing (ISSN: 14327643), Springer
- CMC-Computers, Materials & Continua (ISSN: 1546-2226), Tech Science Press
- Blockchain: Research and Applications (ISSN 2096-7209), Elsevier
- Computer Systems Science and Engineering (ISSN: 0267-6192), Tech Science Press
- PLOS ONE (ISSN 1932-6203), PLOS Publisher
- Applied Sciences (ISSN: 2076-3417), MDPI
- Agriculture (ISSN: 2077-0472), MDPI
- Mathematics (ISSN: 2227-7390), MDPI
- Computers (ISSN: 2073-431X), MDPI

- PLOS Digital Health (ISSN 2767-3170), PLOS Publisher
- Annals of Operations Research (ISSN: 0254-5330, 1572-9338), Springer Nature
- SN computer science (ISSN: 2661-8907), Springer Nature
- International Journal of Human-Computer Interaction (IJHCI), (ISSN: 1044-7318, 1532-7590), Taylor and Francis Ltd.
- Big Data and Cognitive Computing, (ISSN: 2504-2289), MDPI
- Electronic Commerce Research, (ISSN: 1389-5753), Springer
- Journal of Ambient Intelligence and Humanized Computing (ISSN: 1868-5137, 1868-5145), Springer
- Electronics (ISSN: 2079-9292), MDPI
- Energies (ISSN: 1996-1073), MDPI
- Healthcare (ISSN: 2227-9032), MDPI
- Heritage (ISSN: 2571-9408), MDPI
- Information (ISSN: 2078-2489), MDPI
- Smart Cities (ISSN: 2624-6511), MDPI
- Sensors (ISSN: 1424-8220), MDPI
- Sustainability (ISSN: 2071-1050), MDPI
- Symmetry (ISSN: 2073-8994), MDPI
- Technologies (ISSN: 2227-7080), MDPI
- Telecom (ISSN: 2673-4001), MDPI
- Entropy (ISSN: 1099-4300), MDPI
- Tsinghua Science & Technology (ISSN: 1878-7606), Tsinghua University
- Journal of Information & Knowledge Management (JIKM) (ISSN: 0219-6492, 1793-6926), World Scientific Publishing Company
- Journal of Interconnection Networks (ISSN: 0219-2659, 1793-6713), World Scientific Publishing Company
- ACM Transactions on Internet Technology (ISSN: 1533-5399, 1557-6051), ACM
- International Journal of Electronic Finance (IJEF) (ISSN: 1746-0077, 1746-0069), Inderscience
- International Journal of Advanced Computer Science and Applications (IJACSA), ISSN: 2156-5570 (Online), The Science and Information (SAI) Organization
- 3rd IEEE International Conference on Emerging Smart Computing and

Informatics (IEEE-ESCI 2021)

- 2nd International Conference On Smart Technologies for Smart Nation (SmartTechCon 2021)

### III. SPECIAL SESSION/SYMPOSIUM ORGANISED AND CHAIRED

- **Shadab Alam**, Faheem Syeed Masoodi, and Mohammad Ubaidullah Bokhari organized a Special Session titled “Communications and Security” as a Technical Programme Committee during INDIACom-2024; 18th INDIACom; 2024 11th International Conference on “Computing for Sustainable Global Development,” organized by BVICAM, New Delhi 28 February – 01 March 2024.
- **Shadab Alam**, Mousa Mohammed Khubrani, and S.K. Niranjan organized a special session titled “**Blockchain and IoT Applications, Security Challenges, and Recent Trends**” at the 2nd International Conference On Smart Technologies for Smart Nation (SmartTechCon 2023) at Amity Global Institute Singapore from 18 - 19 August 2023
- International Program Committee Member for the conference “**Blockchain & Cryptocurrency Congress (B2C’ 2022)**” to be held in Barcelona, Spain, 16-18 November 2022
- **Shadab Alam**, Mousa Mohammed Khubrani, and Zaki Ahmed Khan organized a special session titled “**Blockchain: Applications and Innovations**” at the 3<sup>rd</sup> IEEE International Conference on Emerging Smart Computing and Informatics (IEEE-ESCI 2021) from 5th to 7th March 2021.

### IV. WORKSHOPS / SEMINARS / CONFERENCES ORGANISED

- Organized and hosted a one-day seminar on “**Security Concerns in the Internet of Things (IoT) and Future Research Directions**” for the Research Unit, College of Computer Science and IS, Jazan University, Jazan, 25th March 2017.
- Organized and hosted a two-day workshop on “**Educational Resource Planning (EdRP)**” in the Department of Computer Science, AMU, Aligarh, 17-18 January 2012.
- Organized a one-day seminar on “**Cyber Crime**” for the Police Department of the Aligarh (UP) zone at the Department of Computer Science, AMU, Aligarh.



## V. WORKSHOPS / FDPs/ SEMINARS /CONFERENCES ATTENDED

- F1.** Participated in **IEEE OPJU International Technology Conference on Emerging Technologies for Sustainable Development** (8-10 Feb 2023) at O.P. Jindal University, Raigarh, Chhattisgarh, India.
- F2.** Participated in **IEEE International Conference On Smart Computing and Application (ICSCA 2023)**, College Of Computer Science And Engineering, University of Ha'il, Ha'il, Saudi Arabia, 5-6 February 2023.
- F3.** Participated in a one-week AICTE-ISTE-sponsored online refresher program on **“Cryptology & Network Security”** organized by Pranveer Singh Institute Of Technology (PSIT), Kanpur, from 07th January to 13th January 2022.
- F4.** Participated in a One-week AICTE-ISTE sponsored online Faculty Development Programme on **“Cybersecurity”** organized by the Center for Cryptography, Cyber Security & Digital Forensics (C3-SDF), Department of Computer Science & Engineering, LNMIIT Jaipur, India, from 03rd January to 08th January 2022.
- F5.** Participated in One week of the Virtual International Faculty Development Programme (FDP) on **“Current Research Trends in Computer Science”** organized by Anna Adarsh College For Women, Chennai, India, from 16/12/2021 to 22/12/2021.
- F6.** Participated in a Two-week Faculty Development Programme (FDP) on **Next-Gen Computing Technologies Organized** by the Department of Computer Application under the aegis of Human Resource Development Centre (HRDC), Integral University, Lucknow, India, from 10-11-2021 to 25-11-2021
- F7.** Participated in the Second International Conference on **Emerging Trends in Materials, Computing and Communication Technologies ‘ICETMCCT 2021’** Pottalkulam, India, From 09th December 2021 to 10th December 2021.
- F8.** Participated in 7<sup>th</sup> International Conference on **“Software Engineering & Computer Systems (ICSECS-2021)”** ICSECS-ICOCSIM 2021, IEEE, Phang, Malaysia, Aug 24-26, 2021.
- F9.** Participated in Workshop on **“Cyber Security and Digital Forensics”**, Department of Computer Science, AMU, Aligarh, from 26-30 August 2021.
- F10.** Participated in the International Seminar on **“Advances in Artificial Intelligence and Machine Learning”** jointly organized by the Department of Computer Engineering & Interdisciplinary Centre for Artificial Intelligence, Aligarh Muslim University, Aligarh, held from 19th March 2021 to 21st March 2021.
- F11.** Participated in the **2021 International Conference on Advanced Computing and Intelligent Technologies (ICACIT)** Jointly organized by the School of

Computing Science & Engineering and School of Electrical, Electronics & Communications Engineering Galgotias University and Department of Information Engineering and Mathematics Università Di Siena, Italy, during March 20-21, 2021

- F 12.** Participated in the **2nd International Conference on Universal Wellbeing (ICUW 2020)** on 12th December 2020 in Indonesia
- F 13.** Participated in the **Second International Conference on Advances in Cyber Security, ACeS 2020**, Penang, Malaysia, December 8-9, 2020.
- F 14.** Participated in a Webinar on **Optimisation and AI Techniques** organized by Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi, 06th November 2020.
- F 15.** Participated in Webinar on **Software Defined Networking (SDN)** organized by Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi, 31st October 2020.
- F 16.** Participated in the **International Conference on Computing and Information Technology**, September 9-10, 2020, University of Tabuk.
- F 17.** Participated in **NEOM AI Challenge**, which is being held at the Global AI Summit 2020, organized by The Saudi Data & AI Authority (SDAIA) on October 21st-22nd, 2020.
- F 18.** Participated in the **Second International Conference on ICT for Digital, Smart, and Sustainable Development (ICIDSSD '20)**, New Delhi, India, February 27-28, 2020.
- F 19.** Participated in a Webinar on the topic **"Outcome Based Education (OBE)"** delivered by "Prof. O. N. Pandey" organized by Raj Kumar Goel Institute of Technology, Ghaziabad, Uttar Pradesh, India, 03rd October 2020.
- F 20.** Participated in Workshop on **"Student Assessment,"** organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 24th August 2020.
- F 21.** Participated in Workshop on **"SAQF Registration Training Program,"** organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 19th February 2019.
- F 22.** Participated in a Workshop on **"Scales for self-evaluation and self-study of the program based on the new standards,"** organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 17th February 2019.
- F 23.** Participated in Workshop on **"Writing Program Specification an A to Z,"** organized by the Deanship of Academic Development (DAD), Jazan University,

Jazan, on 08th November 2018.

- F24.** Participated in Workshop on “**Assessment in Higher Education,**” organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 12th November 2018.
- F25.** Participated in Workshop on “**Process of Curriculum Development,**” organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 22nd October 2018.
- F26.** Participated in Workshop on “**Program Accreditation Process: Step by Step,**” organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 07th October 2018.
- F27.** Participated in Workshop on “**Assessment of Learning Outcomes –In collaboration with NCAAA**”, organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 05th February 2018.
- F28.** Participated in a Workshop on “**Writing a meaningful course report: A step-by-step workshop,**” organized by the Deanship of Academic Development (DAD), Jazan University, Jazan, on 11th December 2017.
- F29.** Participated in a Training program, “**E-Learning Training Program,**” organized by the Deanship of Distance & E-Learning, Jazan University, Jazan, from 11th to 12th November 2015.
- F30.** Participated in the International conference “**The 4th International Conference CONFLUENCE 2013, the Next Generation Information Technology Summit**”, held at Amity University Uttar Pradesh, India, from 26th to 27th September 2013.
- F31.** Participated in the 10<sup>th</sup> IIRS outreach program on “**Geoweb Services - Technology & Application,**” conducted by the Indian Institute of Remote Sensing, ISRO, Dehradun, from 11th February 2013 to 15th March 2013.
- F32.** Participated in the International conference “**IEEE International Conference on Advanced Research in Engineering and Technology (ICARET - 2013)**”, held at KL University, Guntur, from 08th February to 09th February 2013.
- F33.** Participated in 09<sup>th</sup> IIRS outreach program on “**Remote Sensing, Geographical Information System, and Global Positioning System,**” conducted by the Indian Institute of Remote Sensing, ISRO, Dehradun, from 06-08-2012 to 22-10-2012.
- F34.** Participated in the 06-Day Workshop on “**Personality Development and Communication Skills**” organized by Aligarh Muslim University in collaboration with MESCO, Hyderabad, from 14-20 November 2012.

- F35.** Participated in the National Instructional Workshop on “**Cryptology,**” **organized by Manipal University, Jaipur,** and the Cryptology Research Society of India from 21 to 23rd June 2012.
- F36.** Participated in National Workshop on “**Cryptography and Number Theory,**” **organized** by Centre for Mathematical Sciences sponsored by the Department of Science and Technology, Govt. of India from May 03-06, 2012.
- F37.** Participated in Workshop on “**EdRP (Educational Resource Planning),**” **organized** by Department of Computer Science, AMU, Aligarh under the aegis of NMEICT, MHRD, Govt. of India from 17 to 18th January 2012.
- F38.** Participated in Workshop on “**Emerging Trends in Information and Communication Technology (ETICT 2011)**”, organized by the Department of Computer Engineering, AMU, Aligarh, from 19 to 20 February 2011
- F39.** Participated in the short-term course on “**Multimedia Signal Processing**”, organised by the Department of Electronics Engineering and UGC Academic Staff College, AMU, Aligarh, from 07 to 12th February 2011.
- F40.** Participated in Workshop on “**Network Security & Applications,**” **organized** by the University Women’s Polytechnic, AMU, Aligarh, from 05 to 06th February 2011.

## **H. CONTRIBUTION TO INSTITUTIONAL / ADMINISTRATIVE WORK**

- 1. Head of Program Assessment Committee** for the Department of Computer Science, Jazan University, Jazan, from October 2018 to 2022.
- 2. Head of the Curriculum and Teaching Committee** for the Department of Computer Science, Jazan University, Jazan, from October 2022 to date.
- 3. Member of the Quality System Management Committee** for the Department of Computer Science, Jazan University, Jazan, from November 2019 to date.
- 4. Member Program Curriculum Committee** for the Department of Information Technology & Security, Jazan University, Jazan, from October 2019 to 2022.
- 5. Head Curriculum Review Committee (CRC)** in the Department of Computer Science, Jazan University, Jazan, from October 2017 to October 2018.

6. **Secretary of the ABET Committee** for BS (Computer Science Program) accreditation at Jazan University, Jazan, from October 2014 to May 2017.
7. **Member of the Graduation Project Committee** at Jazan University, Jazan, from October 2015 to date.
8. **Head, Quality Assurance Unit (QAU)**, College of Computer Science and Information Technology, Jazan University, Jazan, from January 2019 until December 2019.
9. **Track Leader** for Algorithm & Complexity Track for BS (Computer Science Program) in Jazan University, Jazan, from January 2020 to date.
10. **Course Coordinator** for the Computer Data Security and Privacy course for BS (Computer Science Program) in Jazan University, Jazan, from January 2017 to date.
11. **Member, Research Unit** for College of Computer Science and Information Technology, Jazan University, Jazan, from November 2020 to August 2021.
12. **Member Program Advisory Committee** for the Department of Computer Science, Jazan University, Jazan, from October 2019 to June 2021.
13. **Program Quality Coordinator** (NCAAE Committee) for the Department of Computer Science, Jazan University, Jazan, from October 2017 to December 2019.
14. **In-charge** of the new BS (Computer Science) **Curriculum Development team**. I have designed and evaluated courses and curriculum plans for the **BS (Computer Science)** program in the Department of Computer Science, Jazan University, Jazan.
15. **Member Curriculum Review Committee (CRC)** in the Department of Computer Science, Jazan University, Jazan, from October 2018 to February 2020.
16. **Member Curriculum Review Committee (CRC)** in the Department of Computer Science, Jazan University, Jazan, from November 2015 to October 2017.
17. **Track Leader** for Operating System Track for BS (Computer Science Program) in Jazan University, Jazan, from May 2018 to December 2019.
18. **Track Leader** for Programming Track for BS (Computer Science Program) at Jazan University, Jazan, from September 2017 to May 2018.
19. **Track Leader** and Course Coordinator for Project Track of BS (Computer

Science Program) at Jazan University, Jazan, from April 2015 to October 2017.

#### **I. MEMBERSHIPS IN PROFESSIONAL BODIES:**

- **Senior Member** Institute of Electrical and Electronics Engineers (SMIEEE)
- Member IEEE Computer Society
- Life Time Member of the Cryptology Research Society of India (CRSI)
- Member of the Association for Computing Machinery (ACM)
- Member of the Computer Science Teachers Association (CSTA)
- Member of the International Association of Engineers (IAENG)

#### **J. PERSONAL PROFILE**

- Father's Name: Late Mr. Nafis Alam
- Gender: Male
- Nationality: Indian
- Linguistic Abilities: Fluent in English, Hindi, and Urdu; Proficient in Arabic.

#### **DECLARATION**

I hereby declare that the information furnished above is correct to the best of my knowledge.

Dated:

Place:

**(DR. SHADAB ALAM)**

#### **REFERENCES**

References are available upon request.