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Dr. Shaukat Ali (Post-Doctoral, UK)

Education

Post-Doctoral Fellow (2021) (HEC Post-Doctoral Scholar)

Awarded and financed by the Higher Education Commission (HEC) of Pakistan.

School of Computing and Communications,

Lancaster University, UK

Supervisor: Prof. Dr. Corina Sas

Ph. D in Computer Science (HEC Indigenous Scholar)

Department of Computer Science, University of Peshawar, Pakistan

CGPA: 4.0/4.0 (100%)

Major area of specialization: Web Engineering and Web Semantics

Minor area of specialization: Smartphone-Based Semantic Lifelogging for

Human Memory Augmentation

Research Topic: Exploiting Sensor Data Semantics for Smartphone-Based Lifelogging: Towards Development of Digital Prosthetic Memory on

Smartphones

Supervisor: Prof. Dr. Shah Khusro

Research Experience

Scholar Profiles/IDs

University of Peshawar Website:

http://www.uop.edu.pk/departments/Teaching-Faculty/?r=939&q=Dr-Shaukat-Ali **Google Scholar:**

https://scholar.google.com/citations?pli=1&authuser=1&user=NblMif0AAAAJ **ORCID:**

https://orcid.org/0000-0002-6959-3401

Patents

 Shaukat Ali, Corina Sas, Shah Khusro, Mumtaz Khan. Smart TV-based Lifelogging System: Design and methods for capturing, processing storing, searching and retrieving lifelogging information of smart TV users. Application ID: 591/2021, IPO Journal Code:210914. (Filed to IPO Pakistan)

Research Publications

Journals Publications

- 1. Islam Zada, Sara Shahzad, **Shaukat Ali**, and Raja Majid Mehmood. "OntoSuSD: Software engineering approaches integration ontology for sustainable software development." Software: Practice and Experience, vol. 53(2), pp. 283-317, 2023.(**JCR/IF**)
- 2. Mohammed Naif Alatawi, Najah Alsubaie, Habib Ullah Khan, Tariq Sadad, Hathal Salamah Alwageed, **Shaukat Ali**, and Islam Zada. "Cyber Security against Intrusion Detection Using Ensemble-Based Approaches." Security and Communication Networks, vol. 2023, 2023. (**JCR/IF**)
- 3. Saif Ur Rehman, Muhammad Altaf Khan, Habib Un Nabi, **Shaukat Ali**, Noha Alnazzawi, and Shafiullah Khan. "TKIFRPM: A Novel Approach for Topmost-K Identical Frequent Regular Patterns Mining from Incremental Datasets." Applied Sciences, vol. 13(1), pp. 654, 2023. (**JCR/IF**)

- 4. **Shaukat Ali**, Shah Khusro, Akif Khan, Inayat Khan, Iftikhar Alam, and Salman Faiz Solehria. "SLOG: smartphone-based semantic lifelogging framework for digital prosthetic memory development." Personal and Ubiquitous Computing, vol. 2022, pp. 1-32, 2022.(**JCR/IF**)
- Islam Zada, Shaukat Ali, Inayat Khan, Myriam Hadjouni, Hela Elmannai, Muhammad Zeeshan, Ali Mohammad Serat, and Abid Jameel. "Performance evaluation of simple K-mean and parallel K-mean clustering algorithms: big data business process management concept." Mobile Information Systems, vol. 2022, pp. 1-15, 2022. (JCR/IF)
- 6. **Shaukat Ali**, Islam Zada, Zahid Mehmood, Amin Ullah, Haider Ali, and Mujeeb Ullah, "Publising and Interlinking COVID-19 Data Using Linked Open Data Principles: Toward Effective Healthcare Planning and Decision-Making," Mathematical Problems in Engineering, vol. 2022, 2022. DOI: 10.1155/2022/4792909. (JCR/IF)
- Mumtaz Khan, Shah Khusro, Iftikhar Alam, Shaukat Ali, Inayat Khan, "Perspectives on the Design, Challenges, and Evaluation of Smart TV User Interfaces," Scientific Programming, vol. 2022, Article ID 2775959, pp. 1-14, 2022. DOI: 10.1155/2022/2775959. (JCR/IF)
- Inayat Khan, Sanam Rizvi, Shah Khusro, Shaukat Ali, and Tae-Sun Chung, "Analyzing Drivers' Distractions due to Smartphone Usage: Evidence from AutoLog Dataset," Mobile Information Systems, vol. 2021, pp. 1-14, September 2021. DOI: 10.1155/2021/5802658. (JCR/IF)
- Inayat Khan, Shah Khusro*, Niamat Ullah, and Shaukat Ali, "AutoLog: Towards the Design of a Vehicular Lifelogging Framework for Capturing, Storing, and Visualizing LifeBits," IEEE ACCess, vol. 8, pp. 1-15, July 2020. DOI: 10.1109/ACCESS.2020.3011660. (JCR/IF)
- 10. **Shaukat Ali,** Shah Khusro, Akif Khan, Inayat Khan, and Salman Faiz Solehria, "An Insight of Smartphone-Based Lifelogging: Issues, Challenges, and Research Opportunities," Proceedings of the Pakistan Academy of Sciences: A Physical and Computational Sciences, vol. 56(3), pp. 69-84, 2019. **(HEC Category X)**
- 11. **Shaukat Ali**, Shah Khusro, Irfan Ullah, Akif Khan, and Inayat Khan, "SmartOntoSensor: Ontology for Semantic Interpretation of Smartphone Sensors Data for Context-Aware Applications," *Journal of Sensors*, vol. 17(2017), pp. 1-26, 2017. (JCR/IF)
- 12. Shah Khusro, **Shaukat Ali**, Iftikhar Alam, and Irfan Ullah, "Performance Evaluation of Desktop Search Engines Using Information Retrieval Systems Approaches," *Journa I of Internet Technology*, vol. 99(99), pp. b1-11, 2017. **(JCR/IF)**
- 13. Inayat Khan, Shah Khusro, **Shaukat Ali**, and Jamil Ahmad, "Sensors are Power Hungry: An Investigation of Smartphone Sensors Impact on Battery Power from Lifelogging Perspective," *The Journal of Bahria University Information and Communication Technologies, BUJICT*, vol. 9(2), 2016. **(HEC Category Y)**
- 14. **Shaukat Ali** and Shah Khusro, "Mobile Phone Sensing: A New Application Paradigm," *Indian Journal of Science and Technology*, vol. 9(19), pp. 1-42, 2016. (Master List Journal)
- 15. **Shaukat Ali** and Shah Khusro, "POEM: Practical ontology engineering model for semantic web ontologies," *Cogent Engineering*, vol. 3(1), p. 39, 2016. **(Scopus Indexed)**
- 16. Inayat Khan, Shah Khusro, Shaukat Ali, and Aziz Ud Din, "Daily Life Activities on Smartphones and Their Effect on Battery Life for Better Personal Information Management," Proceedings of the Pakistan Academy of Sciences: A Physical and Computational Sciences, vol. 53(1), pp. 61-74, 2016. (HEC Category X)
- 17. Fakhre Alam, Sami ur Rahman, Shah Khusro, and **Shaukat Ali**, "Towards a Semantic Web Stack Applicable for Both RDF and Topic Maps: A Survey," *University of Engineering and Technology Taxila. Technical Journal*, vol. 20, p. 114, 2015. (**HEC Category Y**)
- Fakhre Alam, Sami ur Rahman, Shah Khusro, and Shaukat Ali, "A Road Map for Killer Applications in Resource Description Framework (RDF) and Topic Maps," Science International, vol. 27, 2015. (Master List Journal/HEC Category Y)
- 19. Fakhre Alam, Muhammad Abid Khan, Sami ur Rahman, Shah Khusro, and **Shaukat Ali**, "Resource Description Framework and Topic Maps: Complementary

- or Competitive?," Proceedings of the Pakistan Academy of Sciences: A Physical and Computational Sciences, vol. 52(1), pp. 1-14, 2015. (HEC Category X)
- 20. Fakhre Alam, **Shaukat Ali**, Muhammad Abid Khan, Shah Khusro, and Azhar Rauf, "A comparative study of RDF and topic maps development tools and APIs," *The Journal of Bahria University Information & Communication Technology, BUJICT*, vol. 7(1), p. 1-12, 2014. **(HEC Category Y)**
- 21. **Shaukat Ali**, Shah Khusro, Asif Ali Khan, and Liaq Hassan, "A Survey of Mobile Phones Context-Awareness Using Sensing Computing Research," *Journal of Engineering and Applied Sciences*, vol. 33(4), pp. 75-93, 2014. **(HEC Category X)**
- 22. **Shaukat Ali**, Shah Khusro, Azhar Rauf, and Saeed Mahfooz, "Sensors and Mobile Phones: Evolution and State-of-the-Art," *Pakistan journal of science* vol. 66(4), pp. 386-400, 2014. **(HEC Category Y)**
- 23. Fakhre Alam, Muhammad Abid Khan, **Shaukat Ali**, and Shah Khusro, "The jigsaw of resource description framework (RDF) and topic maps serialization formats: A survey," *Proceedings of the Pakistan Academy of Sciences: A Physical and Computational Sciences*, vol. 51(2), pp. 101-114, 2014. (**HEC Category X**)
- 24. Shah Khusro, **Shaukat Ali**, Azhar Rauf, Syed Mahfooz, Syed Rahman Mashwani, Akif Khan, et al., "Unleashing sensor data on linked open data-the story so far," *Life Science Journal*, vol. 10, pp. 1766-1785, 2013. (**JCR/IF**)
- 25. Shah Khusro, Akif Khan, Syed Mahfooz, Azhar Rauf, and **Shaukat Ali**, "Navigating and Browsing Linked Open Data: State-of-the-Art," *Life Science Journal*, vol. 10, 2013. (JCR/IF)
- 26. Shah Khusro, Syed Rahman Mashwani, Azhar Rauf, Syed Mahfooz, and **Shaukat Ali**, "A Study of File System Objects' Metadata," Life Science Journal, vol. 10, 2013. (JCR/IF)
- 27. Rafiullah Khan, **Shaukat Ali**, "Conceptual Framework of Redundant Link Aggregation", *Computer Science & Engineering: An Internaltion Journal (CSEIJ)*, Vol. 3, No. 2, April 2013.

Conference Publications & Book Chapters

- 1. Shaukat Ali, Shah Khusro, and Mumtaz Khan. "Desktop Search Engines: A Review From User Perspectives." Protecting User Privacy in Web Search Utilization, IGI Global, 2023, pp. 63-96. https://doi.org/10.4018/978-1-6684-6914-9.ch004. (IGI Global Book Chapter)
- 2. **Shaukat Ali**, Shah Khusro, Akif Khan and Hayat Khan, "Smartphone-Based Lifelogging: Towards Realization of Personal Big Data," in Information and Knowledge in Internet of Things. CFC IKIT 2021. EAI/Springer Innovations in Communications and Computing Series, pp. 249-309, Springer Nature Switzerland, 2022. DOI: 10.1007/978-3-030-75123-4 12 (Springer Book Chapter)
- 3. **Shaukat Ali**, Shah Khusro, Sajid Anwar and Abrar Ullah, "OntoCOVID: Ontology for Semantic Modeling of COVID19 Statistical Data," in Proceedings of the 15th International Conference on Information Technology and Applications (ICITA 2021), Nov. 13-14, 2021, Dubai, UAE. **(Springer)**
- 3. Waheed Murad, Shah Khusro, Iftikhar Alam, and **Shaukat Ali**, "Recommending Expert Freelancers to Buyers in Online Marketplace", in *Proceeding of 1st IEEE International Conference on Electrical, Communication, and Computer Engineering (ICECCE 2019*), Swat, Pakistan, 2019. **(IEEE)**
- 4. Summan Zeb, Shah Khusro, **Shaukat Ali**, and Fakhre Alam "Smartphone Based Indoor Navigation for Blind Persons using User Profile and Simplified Building Information Model", in *Proceeding of 1st IEEE International Conference on Electrical, Communication, and Computer Engineering (ICECCE 2019)*, Swat, Pakistan, 2019. (IEEE)
- Inayat Khan, Shaukat Ali, and Shah Khusro, "Smartphone Based Lifelogging: Investigation of Data Volume Generation Strength of Smartphone Sensors," in Simulation Tools and Techniques. SIMUtools 2019. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Vol; 295, pp. 63-73, Springer Nature Switzerland, 2019. DOI: 10.1007/978-3-030-32216-8 6 (Springer Book Chapter)
- 6. Asim Ullah, Irfan Ullah, Shah Khusro, and Shaukat Ali, "BookOnt: A

Comprehensive Book Structural Ontology for Book Search and Retrieval," in Frontiers of Information Technology (FIT), 2016 International Conference on, 2016, pp. 211-216. (IEEE)

- 7. **Shaukat Ali**, Sajid Anwar, Salman Faiz Solehria, "User Interaction Based Framework for Protecting User Privacy in Online Social Networks", 14th International Conference on Informatics and Semantics in Organizations (ICISO), Stockholm, Sweden, 2013.
- 8. **Shaukat Ali**, Shah Khusro, Azhar Rauf, "A Cryptography Based Approach to Web Mashup Security", International Conference on Computer Networks and Information Technology (ICCNIT), Bara Gali, Pakistan, 2012. **(IEEE)**

Professional Experience



Employer: Department of Computer Science

University of Peshawar

KP, Pakistan

Position: Lecturer in Computer Science

February 2015 - to-date



Employer: Federal Govt. Educational Institutions (FGEI's)

Ministry of Defense

Pakistan

Position: Assistant Professor in Computer Science

November 2003 - February 2015



Employer: Qurtuba University of Science and Information Technology

Peshawar, Pakistan

Position: Lecturer in Computer Science

January 2002 - November 2003

Projects and Developments



- BS(CS) Program Coordinator of the Department of Computer Science Incubation Center since 2015. Mentored and supervised several start-ups.
- Completion of establishment of Web Engineering Lab at the Department of Computer Science, University of Peshawar funded by the IT Directorate Govt. of Kyber Pakhtunkhwa in 2016.
- Establishment of ICT Accessibility Lab at the Department of Computer Science, University of Peshawar - funded by the IT Directorate Govt. of Khyber Pakhtunkhwa.

Training(s) and Courses

- Attend 5 Days Training Course on "Cloud computing, configuration and management" from the NUST – SEECS Islamabad. The major contents of the training focus on Cloud Computing, Virtualization, Open Source Cloud, Eucalyptus, Windows Azure, Amazon Cloud, Cloud Configuration and Management.
- Attend 5 Days Training Course on "Android Development" from the NUST –
 SEECS Islamabad. The major contents of the training focus on Android Platform,
 Android Development and configuration, Android Activities, Intents, Sensors,
 Augmented Reality, Gaming and Multimedia interactions.
- Attend 3 Days Training Course on "Motivation and Learning: An Educational-Psychological Perspective" from the CHRCH University of Peshawar. The major contents of the training focus on motivating and increasing learning capabilities of

students at different levels.

- Attend 3 Days Training Course on "Semester Regulations of University of Peshawar" from the CHRCD University of Peshawar. The major contents of the training focus on exploring, discussing, and explaining the semester regulations of the University of Peshawar.
- Attend 3 Days Training Course on "Research Patenting" from the Department of Science and Technology, Govt. of Khyber Pakhtunkhwa, Pakistan. The major contents of the training focus on patent creation, drafting and registration process.

Conferences & Symposiums

- Programm Committie Chair in the 17th International Conference on Information Technology and Applications (ICITA 2023), Oct. 20-22, 2023, Turin, Italy.
- Web chair in the 14th ACM Conference on Creativity and Cognition (C&C,2022), 20-23 June 2022, Venice, Italy.
- 15th International Conference on Information Technology and Applications (ICITA 2021), Nov. 13-14, 2021, Dubai, UAE.
- 1st International Conference on Electrical, Communication, and Computer Engineering (ICECCE 2019) conducted by University of Buner, 24th 25th July, 2019, Swat, Pakistan.
- 5th IEEE Student Conference on Engineering Sciences and Technology (SCONEST 2016) conducted by the Hamdard University, Karachi - 14th to 15th December, 2016.
- International Conference on Computer Networks and Information Technology (ICCNIT) conducted by the Department of Computer Science, University of Peshawar at Baragli Summer Campus University of Peshawar, KP Pakistan -11th to 13th July, 2011.
- Symposium on Emerging Technologies in Information Technology conducted by the Department of Computer Science, University of Peshawar at Baragali Summer Campus University of Peshawar, KP Pakistan - 25th to 27th August, 2013.
- Symposium on Emerging Technologies in Information Technology conducted by the Department of Computer Science, University of Peshawar at Baragali Summer Campus University of Peshawar, KP Pakistan - 26th to 28th August, 2011.
- Symposium on Emerging Technologies in Information Technology conducted by the Department of Computer Science, University of Peshawar at Baragali Summer Campus University of Peshawar, KP Pakistan - 25th to 27th August, 2013.
- Symposium on Emerging Technologies in Information Technology conducted by the Department of Computer Science, University of Peshawar at Baragali Summer Campus University of Peshawar, KP Pakistan 2015.

Stratup Projects

- Smartphone-based system for price dispersion of daily life products/items.
- Smartphone-based anti-drowse system for drivers on highways.
- Environmental pollution monitoring using smartphone and IoT.
- Web portal for online medical consultation and subscription.
- Smartphone-based system for engaging plumbers and electricians.
- Smartphone-based navigation system for BRT passengers.

References

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