Dr Mansoor Farooq
Assistant Professor

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Srinagar, Kashmir, 190003, India

TECHNICAL SKILLS

- Python
- PHP
- C/C++
- JavaScript
- Java
- .Net Technologies
- Ajax
- Django
- Microsoft SQL
- CSS
- Wireshark
- Snort
- NordLocker
- AxCrypt
- Oracle
- Java
- HTMl5
- Anaconda

LANGUAGES

- English
- Urdu
- Arabic

With over 12 years of unwavering dedication as an Assistant Professor, my journey has been one of fostering transformative learning experiences. Guided by a passion for igniting intellectual curiosity, I've enriched the realm of Computer Science education through innovative pedagogy and influential research. My commitment to cultivating future tech visionaries is underscored by a fusion of practical insights and theoretical rigor, preparing students to excel in a dynamic digital landscape. As a steadfast advocate for progress, my legacy is defined by empowered minds, groundbreaking contributions, and an enduring drive to propel the frontiers of knowledge within the realm of academia.

EMPLOYMENT HISTORY

Assistant Professor – Department of Management Studies
University of Kashmir
Srinagar, India
Jun 2021 – Present
- Successfully managed and instructed classes ranging from 40 to 60 students in a range of disciplines including post-graduate, graduate, and scholars.
- Developed and implemented creative curricula, projects, and activities to engage students and enhance learning.
- Created and administered comprehensive exams to evaluate student performance.
- Collaborated with colleagues to design and deliver cross-disciplinary courses.
- Assisted in the development and implementation of a university-wide assessment program.
- Oversaw student research projects, providing guidance and support.
- Served as faculty mentor to junior faculty members.
- Developed and maintained relationships with industry partners to facilitate student internships and research.
- Participated in faculty committees and other university initiatives.
- Published research findings in scholarly journals and presented at conferences.

Lecturer IT- University of Technology and Applied Sciences
Al Musanna, Sultanate of Oman
Oct 2015 – May 2021
- Serve on academic committees and take part in departmental activities
- Evaluate and provide feedback on student work
- Developing new course materials
- Assessing student coursework
- Designing and delivering lectures and seminars
- Engaging in personal research and publishing findings
- Acting as a personal tutor to students
- Create and maintain a positive learning environment in the classroom.
- Plan, prepare and deliver lectures to undergraduate and graduate students
- Acting as advisor to the students

Computer Scientist – Department of Linguistics
University of Kashmir
(Artificial Intelligence/Natural Language Processing/Machine Learning)
Srinagar, India
Sep 2009 – Sep 2013

- Developed various NLP tools using Python and NLP Tool kits
- Used Machine Learning tools, technologies and techniques.
- Write scientific papers detailing findings and submit them to peer-reviewed journals
- Analyze data and conclude from experiments

- Conduct research into new and innovative scientific areas to expand current knowledge
- Train and supervise research assistants
- Plan and execute experiments, analyze data, and write reports
- Collaborate with other scientists internally and externally
- Stay up-to-date on the latest research findings in the assigned area
- Develop and lead research projects in assigned area
- Conduct research into new and innovative scientific areas to expand current knowledge

IT Engineer - G. L. Networks and Systems Pvt. Ltd.
Srinagar, India
Apr 2005 – Jul 2006

- Provide Tier 3 technical support
- Monitor network performance and troubleshoot issues
- Plan and execute network upgrades and expansion projects
- Design, implement, and maintain the network infrastructure
- Plan and implement IT security measures
- Configure and manage network devices
- Provide technical support to users
- Manage the installation and maintenance of computer hardware and software
- Design, develop, and oversee the implementation of new or improved IT systems
- Assist in the development and implementation of IT policies and procedures Perform regular system maintenance
- Configure and manage network security devices Manage network documentation and diagrams.

EDUCATION

Doctor of Philosophy – Shri Venkateshwara University Faculty of Engineering & Technology
India
October 2013 - September 2015

Master of Computer Application – Islamic University of Science & Technology
India
July 2006 - September 2009

Bachelor of Computer Application – University of Kashmir
India
March 2002 - March 2005

RESEARCH

Patent

- Recognition of Emotions in Real-Time for Customer Service using Deeplens Face Detection Application, Mansoor et al, 202241071811, 30-12-2022, Indian Patent.

- Intelligent Traffic Management System for Smart Cities using IoT and Machine Learning Technologies, Mansoor et al, 202311042500, 21-07-2023, Indian Patent.

- Respiration Monitoring Device, Mansoor et al, Design No-6295907, 21-07-2023, **UK Design Patent**

- Voice Recognition Device, Mansoor et al, Design No-6298502, 22-07-2023 **UK Design Patent.**

Books Published

- Cloud Computing: Business & Economy, Dr Mansoor & Dr Zeeshan, Academic Aspiration 2023.

- Principles, Practices and Solutions for Internet of Things, Dr Mansoor Farooq, Book Rivers, 2023.

- Database Systems, Dr Mansoor Farooq, Rajat Publication 2020

- Pattern Recognition and Genetic Algorithm, Dr Mansoor Farooq, Rajat Publication 2018.

- Mathematical Principle Used in Software Quality Engineering, Dr Mansoor Farooq, Rajat Publication 2019.

Publication

- Performance Evaluation of Blockchain Platforms. **IEEE Proceedings**.

- Network Security and Protection Strategies for Big Data: Challenges and Innovations. **IEEE Proceedings**.

- Unleashing the Power of Big Data: A Comprehensive Analysis and Future Directions. **IEEE Proceedings.**

- Cyber Attack Detection Using Machine Learning Techniques in IoT Networks, Date of Submission 04-01-2023, Journal of Systems Science & Complexity **Springer, SCIE, Scopus, Accepted**

- Stout Implementation of Firewall and Network Segmentation for Securing IoT Devices, Indian Journal of Science & Technology., Vol 16, No 33, 2609-2621, Sep 2023 **(SCI) (Web of Science)**

- Artificial Intelligence-Based Approach on Cyber Security Challenges and Opportunities in The Internet of Things & Edge Computing Devices. International Journal of Engineering and Computer Science (IJECS), Vol 12, No 7, July 2023, ISSN 2319-7242, https://doi.org/10.18535/ijecs/v12i07.4744 (**EBSCOHost, Goole Scholar)**

- Signature-Based Intrusion Detection System in Wireless 6G IoT Networks. Journal on Internet of Things, 2022, 4(3), 155-168. ISSN: 2579-0099 (print), ISSN: 2579-0080 (Online) https://doi.org/10.32604/jiot.2022.039271 **(Web of Science)**

- Supervised Learning Techniques for Intrusion Detection System Based on Multi-layer Classification Strategy. International Journal of Advanced Computer Science and Applications (IJACSA), The Science and Information Organization SAI), Vol 13, No 3, March 2022, ISSN online 2156-5570 ISSN Print 2158-107X, DOI 10.14569/IJACSA.2022.0130338 **(Web of Science) (ESCI)**

- IoT Smart Homes Security Challenges and Solutions International Journal of Security and Networks (IJSN), Inderscience Publications, Vol-16, No. 4 PP 235-243, December 2021, ISSN online 1747-8413 ISSN print 1747-8405, DOI: 10.1504/IJSN.2021.119395. **(Scopus)**

- Color Edge Detection Based on the Fusion of Intensity and Chromatic Difference. International Journal of Recent Technology and Engineering (IJRTE) Vol-8, Issue 6, March 2020, ISSN (Online) 2277-3878, DOI: 10.35940/ijrte. F7321.038620. **(Scopus)**

- Enhancement and Segmentation of Digital Images using Genetic Algorithm. International Journal of Research in Electronics and Computer Engineering, I2OR, Melbourne, Australia (IJRECE) Vol-7, Issue 2, Version-6, April-June 2019, ISSN (Online) 2348-2281, ISSN (Print) 2393-9028. **(SCI)**

- Pattern Recognition in Digital Images Using Fractals". International Journal of Engineering and Advanced Technology (IJEAT)Vol-9, Issue 2, December 2019, ISSN (Online) 2249-8958, DOI: 10.35940/ijeat. B4229.129219 **(Scopus)**

- Challenges, Problems, and Issues Faced in Language-Specific Synset Creation and Linkage in the Kashmiri WordNet. The WordNet in Indian Languages. 2017; 209:209–220, **(Springer)**

- Application of Genetic Algorithm & Morphological Operations for Image Segmentation. International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) Vol. 4, Issue 3, March 2015, ISSN (Online) 2278-1021, ISSN (Print) 2319-5940, DOI 10.17148/IJARCCE.2015.4347. **(NAAS)**

- Optimizing Pattern Recognition Scheme Using Genetic Algorithms in Computer Image Processing. International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Vol 4, Issue 3, March 2015, ISSN: 2278 – 1323. **(Google Scholar, Peer-Reviewed, Referred)**

- Application of Genetic Programming for Pattern Recognition. International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) Vol. 4, Issue 4, April 2015, ISSN (Online) 2278-1021, ISSN (Print) 2319-5940, DOI 10.17148/IJARCCE.2015.4403. **(NAAS)**

- Genetic Algorithm Technique in Hybrid Intelligent Systems for Pattern Recognition. International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) (An ISO 3297: 2007 Certified Organization) Vol. 4, Issue 4, April 2015, ISSN (Online) 2319-8753, ISSN (Print) 2347-6710, DOI: 10.15680/IJIRSET.2015.0404012 **(Google Scholar, Peer-Reviewed, Referred)**

- Split/Merge and Chromosome Encoding Model of Genetic Algorithm for Image Segmentation & Optimization. International Journal of Advance Research in Computer Science (IJARCS) Volume 6, Issue 2, March-April 2015, ISSN 0976-5697. **(Google Scholar, Peer-Reviewed, Referred)**

- Intrusion Detection System in The Internet of Things Neural Network-Based Multiple Layer Approach: Design and Analysis Date of Submission 25-07-2023, International Journal of Next-Generation Computing. **Web of Science**. Under Review

- Securing the Unseen Realm: Leveraging Markov Random Fields and Loopy Belief Propagation for Enhanced Image Security in IoT Devices. Date of Submission 09-08-2023, Cluster Computing, **Springer,** Under review.

- QuantIoT Novel Quantum Resistant Cryptographic Algorithm for Securing IoT Devices: Challenges and Solution. Date of Submission 19-07-2023, Discover Internet of Things, **Springer,** Under review.

- Enhancing Resilience of IDS/IPS Systems against Adversarial Attacks through Integration of Novel Algorithms and Multi-Layered Defense. Data of Submission 20-07-2023, Cyber Security and Application, **Elsevier Science Direct,** Under review.

- Intrusion Detection and Prevention System for IoT Systems Using Generative Adversarial Networks: Challenges & Solutions. Date of Submission 15-07-2023, Ad Hoc & Sensor Wireless Networks, **Scopus,** Under review.

- Implementation of Network Security for Intrusion Detection & Prevention System In IoT Networks: Challenges & Approach, Date of Submission 04-08-2023, Int. J. of Computer Applications in Technology, **Inderscience, Scopus,** Under review

- Q-learning and Deep Q Networks for Securing IoT Networks, Challenges and Solution, Date of Submission 02-08-2023, International Journal of Computer Network and Information Security (IJCNIS), **Scopus,** Under review.

Projects

- **Development of Indradhanush: Artificial Intelligence, Natural Language Processing and Machine learning** project for An Integrated WordNet for 8 Indian Languages (Research & Development)

- **Development of Shallow Parser Tools Artificial Intelligence, Natural Language Processing and Machine Learning** project for 12 Different Languages (Research & Development)

- **Development of Tri-lingual Online Kashmiri-Hindi-English Dictionary (Research & Development)**

INTERNATIONAL/NATIONAL WORKSHOPS AND SEMINAR

- ICICAT 2023: International Conference on IoT, Communication and Automation Technology, India held on 23rd and 24th June 2023.

- COMSNETS 2023: 15th International Conference on COMmunication Systems & NETworkS, Bengaluru, India held from 03 to 08 January 2023

- IEEE-iSSSC 2022: 2nd IEEE International Symposium on Sustainable Energy, Signal Processing and Cyber Security, India held from 15th to 17th December 2022

- CyBlock 2020: COMSNET2020 Workshop - Workshop on Cyber Security and Blockchain, Bengaluru, India held on 7th January 2020

- ICISS 2019: 15th International Conference on Information Systems Security Conference Series: International Conference on Information Systems Security held from 8th to 20th December 2019.

- Participated in Workshop on "Data Mining Using Weka" organized by the Department of Engineering in collaboration with Muscat College at AL-Musanna College of Technology, Sultanate of Oman held on Feb 2019.

- Participated in a seminar on "Students Psychology" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on January 2018.

- Participated in a workshop on "Preparing/re-designing new Strategic Plan 2018-23" organized by the Department of Information Technology and Quality Assurance Department, at AL-Musanna College of Technology, Sultanate of Oman held on April 2018

- Participated in a workshop on "Developing Course Materials using Open Educational Resources (OER)" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on May 2018.

- Participated in a seminar on "Q&A Session on Advisement" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on June 2018.

- Participated in Workshop on "Application of Engineering Mathematics using MATLAB" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on June 2018.

- Participated in a seminar on "Learning Techniques for Different Learners" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on September 2017.

- Participated in a seminar on Promoting Critical Thinking & Effective classroom involvement" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on September 2017.

- Participated in a seminar on "M-Learning (SCL)" organized by Department of Information Technology speaker Dr Mohammed Saraab researcher from Sultan Qaboos University, at AL-Musanna College of Technology, Sultanate of Oman held on October 2017.

- Participated in a workshop on "Application of Engineering Mathematics using MATLAB" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on 07 November to 14 November 2017.

- Participated in a seminar on "Using E-learning in Classes" organized by the of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on January 2016.

- Participated in a workshop on "Creating Unique Assignments and Activities" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on February 2016.

- Participated in a seminar on "What is MOOC" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held in April 2016.

- Participated in workshop on "QA Workshop "Identifying Graduate Attributes for all Courses" organized jointly by the Department of Information Technology & Quality Assurance Department, at AL-Musanna College of Technology, Sultanate of Oman held in April 2016.

- Participated in a seminar on "Test writing & Evaluation strategies" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on May 2016.

- Participated in "International Conference on English Language & Literature- A Tool For Humanizing (ELLATH – 2015)" at Lingaya's University in association with Cambridge English Language Assessment part of the University of Cambridge held from 23 to 24 February 2015.

- Participated in "the 2015 International Conference on Advances in Computers, Communication and Electronic Engineering (COMMUNE – 2015) at the Department of Electronics & Instrumentation Technology, University of Kashmir, Srinagar held from 16th to 19th March 2015.

- Participated in a workshop on "Arithmetic Functions in MATLAB" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held in 2015.

- Participated in a seminar on "Introduction to Image Processing" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held in 2015.

- Participated in a seminar on "Image Processing" organized by the Department of Information Technology, AL-Musanna College of Technology, at AL-Musanna College of Technology, Sultanate of Oman held in 2015.

- Participated in a workshop on "Developing Operational Plan 2015-2016 Syllabus and Curriculum Design" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held in 2015.

- Participated in a 5-day workshop on "Adobe Dreamweaver CS5 and ASP.NET Web Application Development" organized by the Educational Technology Center, at AL-Musanna College of Technology, Sultanate of Oman held on November 2015.

- Participated in a seminar on "Classroom Management & Effective Teaching Methodology" organized by the Department of Information Technology, at AL-Musanna College of Technology, Sultanate of Oman held on November 2015.

- Attended Seminar "3rd Endangered and Lesser Known Languages Seminar" from 19th to 20th February 2015, organized by the Department of Linguistics, University of Lucknow, U. P, in collaboration with Indian Council of Social Science and Research (ICSSR), New Delhi and Central Institute of Indian Languages, Mysore.

- Attended National Seminar on "Electronic Devices, System and Information Security (SEEDS-2015)" from 16th to 18th March 2015, organized by the Department of Electronics and Instrumentation Technology, University of Kashmir, Srinagar sponsored by University Grants Commission, Ministry of Human Resource Development, Government of India.

- Attended Workshop on "Kashmiri Speech Corpus Annotation and Text Corpus Sanitation" from 21st Oct to 6th Nov 2013, organized by the Linguistic Data Consortium For Indian Languages, Central Institute of Indian Languages, Mysore in collaboration with Department of Linguistics, University of Kashmir, Hazratbal Srinagar

- Participated in "3rd IIIT-Hyderabad Advanced School on Natural Language Processing" held at Language Technologies Research Center, International Institute of Information Technology, Hyderabad (IIIT-H) from 23rd May to 5th June 2011.

- Attended the National Workshop on "Pronunciation Lexicon Standards for Indic Languages" jointly organized under the auspices of Center for Linguistics, JNU, Department of Information Technology, Govt. of India and IIT – Kharagpur held at Center for Linguistics, School of Language, Literature & Cultural Studies, Jawaharlal Nehru University, New Delhi on 4th -5th May 2011.

- Attended the Second National Workshop on "Indradhanush Wordnet Development" held at Goa University, Goa from 8th to 10th August 2011.

- Participated in "Orientation Cum Training Program On Natural Language Processing" organized by the Linguistic Data Consortium for Indian Languages, Central Institute of Indian Languages, Mysore in collaboration with the Department of Linguistics, University of Kashmir, Srinagar held at the University of Kashmir, Srinagar from 4th – 15th November 2011.

- Participated "Hindi-English-Kashmiri Dictionary" Workshop held from 12th March 2011 to 18th March 2011 held at the Department of Linguistics, University of Kashmir in collaboration with the Central Institute of Indian Languages, Ministry of Human Resource Development, Mysore

- Attended the Third National Workshop on "Indradhanush Wordnet Development" held at Thapar University, Patiala from 24th to 25th March 2012.

- Participated in "8th International Conference on Natural Language Processing (ICON-2010)" at Indian Institute of Technology, Kharagpur (IIT, Kharagpur) held from 8th to 11th December 2010.

- Participated in National Seminar on "Classical Texts Translation" organized by the Central Institute of Indian Languages, Mysore, in collaboration with the University of Kashmir, Srinagar held at the University of Kashmir, Srinagar from 8th to 9th August 2009.

- Participated in National Workshop on "Dialect Survey of Kashmiri" organized by the Central Institute of Indian Languages, Mysore, in collaboration with the University of Kashmir, Srinagar held at the University of Kashmir, Srinagar from 8th to 9th August 2009.

CERTIFICATION

- Cisco Certified Network Associate
- Cisco Cyber Security Professional

PROFESSIONAL MEMBERSHIP

- International Association of Engineers (IAENG), Hong Kong Member ID- 152177

- Association for Computing Machinery (ACM), New York, USA Member ID- 4745168

MEMBERSHIP

- Member of Accreditations Committee for AICTE/NBA, University of Kashmir
- Member of Registration Committee, Al Musanna College of Technology, Oman
- Member of Time Table Committee, Al Musanna College of Technology, Oman
- Member of Curriculum Development Committee, Al Musanna College of Technology, Oman
- Member of Review Committee, International Conference on Recent Trends in Business, Management & Data Analytics.
- Member of Departmental Audit Committee, Department of Management Studies, University of Kashmir.
- Member of Departmental ITSS Committee, Department of Management Studies, University of Kashmir.

AWARDS & HONORS

- Best Employee Award – Al Musanna College of Technology, Sultanate of Oman

REFERENCES

- **Available on Request**