## Dr. Sultana Parween

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# **Educational Qualifications:**

- Ph.D. in Computer Science from Jamia Millia Islamia (A Central University), 2024.
- Master in Computer Applications (MCA) from IGNOU, New Delhi.

### National Level Competitive Exam Qualified:

Qualified National Eligibility Test (NET) in Computer Science and Application conducted by the University Grants Commission (UGC) in November 2017.

## Fellowships / Awards:

Recipient of MANF scholarship from UGC for pursuing Ph.D. from Jamia Millia Islamia. Senior Research Fellow (SRF) from 2020-2023 Junior Research Fellow (JRF) from 2018-2020

#### Professional/Teaching Experience:

- Presently working as Assistant Professor in the Department of Computer Science and Engineering, Jamia Hamdard, New Delhi.
- Having more than 4 years of enriched experience in teaching.

#### Research Thrust Areas:

- Computer Networks
- Internet of Things (IoT)
- Cross Layer Design (CLD)
- Machine Learning
- Performance Analysis of Protocols

## Job Responsibilities:

- Supervision of Minor/Major Project Work of B.Tech, and BCA students.
- Teaching different papers.
- Paper Settings and Evaluations for various theory and lab papers at Jamia Hamdard.
- Tabulator of Ph.D. (CS/CSE) and Supplementary examination at Jamia Hamdard.
- Other administrative responsibilities assigned in the Department/University.

### Details of Courses taught:

- Machine Learning
- Data Science
- Neural Networks and Deep Learning
- Soft Computing
- Object Oriented Programming
- C programming
- Programming for Problem Solving
- Discrete Structures
- Java Programming
- Introduction to Data Science and Big Data

# Administrative Responsibilities:

- Member of the publication committee in the 4<sup>th</sup> International Conference on ICT for Digital, Smart, and Sustainable Development (ICIDSSD), April 23-24, 2024.
- Member of Syllabus and Bylaws Revision committee for BCA and BSC courses in the Department of Computer Science and Engineering, Jamia Hamdard.
- Member of Ph.D. and M.Tech Admission committee in the Department of Computer Science and Engineering, Jamia Hamdard.
- Member of Annual Quality Assurance Report (AQAR) in the Department of Computer Science and Engineering, Jamia Hamdard.

# Workshop/Webinar:

- 9<sup>th</sup> DBT-BIF National Workshop on Translational Bioinformatics: Guinness Book Recording to Digital Era NWTB: GB2DE-2019, March 6-7, 2019, Department of Computer Science, Jamia Millia Islamia, Central University, India, and funded by Department of Biotechnology, Govt. of India, New Delhi, India.
- Attended "SPOKEN TUTORIAL FOR ALL" session held on 8<sup>th</sup> February 2024 organized by the Department of Computer Science and Engineering, SEST, Jamia Hamdard in association with Spoken Tutorial, IIT Bombay.
- Attended "Managing & Measuring Research: Using SCOPUS Effectively" at Jamia Millia Islamia, on 29 June 2021, Elsevier.
- Participated in the webinar on "Academic Publishing & Enhancing Research Effectiveness" held on 9 June 2020 in Jamia Millia Islamia, New Delhi.
- Participated in the National webinar on "Industrial Internet of Things and Industry 4.0 & IEEE CAS Membership Drive" on 5<sup>th</sup> June, 2020, IEEE Circuits and Systems Society.

#### **Short Term Courses:**

- Successfully completed SWAYAM ONLINE COURSE CERTIFICATION "Data Science using Python" from July - Oct 2024 with secured 84% marks.
- Successfully completed "Advance Diploma in NS3 Simulation Technology" from 29<sup>th</sup> May 20 to 29<sup>th</sup> July 2020.

### Faculty Development Programme:

• Participated and successfully completed the 3-day Face-to-Face FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) at Jamia hamdard, New Delhi from 27th May to 29th May 2024.

#### Reviewer:

- Reviewer, Advances in Science, Technology and Engineering Systems Journal.
- Reviewer, 4th International Conference on ICT for Digital, Smart, and Sustainable Development (ICIDSSD), April 23-24 2024.

## List of Published and Presented Research Papers:

- Parween, Sultana, and Syed Zeeshan Hussain. "Efficient collision control and auction-based resource allocation mechanism in dense LoRaWAN network via TCP using DRL technique." *International Journal* of *Information Technology* (2024): 1-19.
- Parween, Sultana. "Efficient Congestion Control Mechanism and Handover Management Scheme for Performance Enhancement of TCP over IoT Network." *International Journal of Intelligent Engineering & Systems* 17.4 (2024).
- Hussain, Syed Zeeshan, and Sultana Parween. "Analysis of TCP issues and their possible solutions in the internet of things." *International Arab Journal of Information Technology* 20.2 (2023): 206-214.
- Parween, Sultana, and Syed Zeeshan Hussain. "TCP Performance Enhancement in IoT and MANET: A
  Systematic Literature Review." International Journal of Computer Networks and Applications (2023): 54368.
- Parween, Sultana, and S. Hussain. "Cross-Layer based TCP Performance Enhancement in IoT Networks." *International Journal of Advanced Computer Science and* (2022): 3830-396.
- Hussain, Syed Zeeshan, and Sultana Parween. "Comparative study of TCP congestion control algorithm in IoT." 2021 3<sup>rd</sup> international conference on advances in computing, communication control and networking (ICAC3N). IEEE, 2021.
- Parween, Sultana, and Syed Zeeshan Hussain. "A comparative analysis of CoAP based congestion control in IoT." 2021 4<sup>th</sup> international conference on recent trends in computer science and technology (ICRTCST). IEEE, 2022.
- Parween, Sultana, P. K. Manjhi, and Somnath Sinha. "Design of automated irrigation system using zigbee." *International Journal of Engineering Research and Advanced Development* 4.4 (2018): 46-50.
- Parween, Sultana, et al. "A survey on issues and possible solutions of cross-layer design in Internet of Things." *International Journal of Computer Networks and Applications* 8.4 (2021): 311.
- Parween, Sultana, and Syed Zeeshan Hussain. "A review on cross-layer design approach in WSN by different techniques." *Adv. Sci. Technol. Eng. Syst* 5.4 (2020): 741-754.