

Dr. Bindu Verma

Assistant Professor

Department of Information Technology, Delhi Technological University, New Delhi

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Qualifications:

B.Tech(CSE), M.Tech(CSE), Ph.D.

Education Background:

- Ph.D. (Computer Science & Engineering), July 2015-November 2019, Jawaharlal Nehru University (JNU), New Delhi
- M.Tech. (Computer Science and Engineering), August 2013 - July 2015 from Jawaharlal Nehru University (JNU) , New Delhi
- B.Tech. (Computer Science and Engineering), June 2012 , UPTU.

Work Experience:

1. Dec. 2020 - Present, Assistant Professor, Department of Information Technology, Delhi Technological University, Delhi
2. August 2017- Dec. 2020, Assistant Professor, Department of Computer Science and Information Technology, Jaypee Institute of Information Technology, Noida
3. July 2015 - August 2017, UGC Junior/Senior Research Fellow, School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi.
4. February 2013 – August 2013, Software Engineer, Accenture India Limited, Bangalore, India.

Areas of Interest:

Machine Learning, Deep Learning, Computer Vision, Image Processing, Human –Computer Interaction, Assistive Technologies, Emotion Monitoring, Affective Computing, Autonomous Vehicle,

Teaching Interest:

Machine Learning, Data Structures, Database Management System, Theory of Computation, C Programming, Android Programming, Object Oriented Programming, Operating Systems, Data Base Management Systems.

Achievements:

- Cleared UGC- Net in December 2013 and June 2014, December 2014 and June 2015. Certificate No: 141023605
- 2013: Cleared GATE Examination with 98.9 Percentile.

- Awarded Junior Research Fellowship and Senior Research Fellowship from UGC in 2015. Award No: F./2014-15/NFO-2014-15-OBC-UTT-6082 /(SA-III/Website)
- Awarded an Financial Assistance, International Travel Support(ITS) from Science and Engineering Research Board (SERB), File No: File Number: ITS/2018/003824

Certifications:

- **Deep Learning.AI complete course certification offered by Coursera.**
 1. Convolutional Neural Networks
 2. Structuring Machine Learning Projects
 3. Improving Deep Neural Networks: Hyper parameter tuning, Regularization and Optimization
 4. Neural Networks and Deep Learning
- 6 months JAVA Core + Advanced Course from DUCAT Noida, 2010.
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International Journals :

1. Bindu Verma, and Ayesha Choudhary. *"Affective state recognition from hand gestures and facial expressions using Grassmann manifold"* in Multimedia Tools and Applications. DOI: <https://doi.org/10.1007/s11042-020-10341-6> [**SCIE: 2.3**]
2. Bindu Verma, and Ayesha Choudhary. *"Framework for dynamic hand gesture recognition using Grassmann manifold for intelligent vehicles."* Journal of IET Intelligent Transport Systems Vol.12, no.7 pp. 721-729, 2018. DOI: [10.1049/IET-ITS.2017.0331](https://doi.org/10.1049/IET-ITS.2017.0331) [**SCIE: 2.05**]
3. Bindu Verma, Ayesha Choudhary, *"Grassmann manifold based dynamic hand gesture recognition using depth data."* *Multimedia Tools Appl* **79**, 2213–2237 (2020). <https://doi.org/10.1007/s11042-019-08266-w> [**SCIE 2.4**]

International Conferences:

1. Bindu Verma, and Ayesha Choudhary. *"Unsupervised learning based 2static hand gesture recognition from RGB-D sensor."* In International Conference on Soft Computing and Pattern Recognition, pp. 304-314. Springer, Cham, 2016.
2. Bindu Verma, and Ayesha Choudhary. *"Deep Learning Based Real-Time Driver Emotion Monitoring."* In IEEE International Conference on Vehicular Electronics and Safety (ICVES), pp.1-6., 2018.
3. Bindu Verma, and Ayesha Choudhary, *"A Framework for Driver Emotion Recognition using Deep Learning and Grassmann Manifolds"*, In 2018 21st International Conference on Intelligent Transportation Systems (ITSC), pp. 1421-1426, 2018.
4. Gupta I, Garg N, Aggarwal A, Nepalia N, Verma B. *"Real-time driver's drowsiness monitoring based on dynamically varying threshold."* In 2018 Eleventh International Conference on Contemporary Computing (IC3) 2018 Aug 2 (pp. 1-6). IEEE.
5. Bindu Verma, and Ayesha Choudhary, *"Dynamic Hand Gesture Recognition using Convolutional Neural Network with RGB-D Fusion"*. In

Proceedings of the 11th Indian Conference on Computer Vision, Graphics and Image Processing 2018 Dec 18 (pp. 1-8).

Member of Professional Bodies:

1. Member of IEEE Professional
2. Member of IEEE ITSS Society

Workshop/Conferences/FDPs/STTC Attended:

1. Attend 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 8 February, 2021 to 12 February, 2021.
2. Attended online Faculty Development Programme on "Emerging Technologies in Cloud computing, IOT, and Blockchain", technically sponsored by CSI Ghaziabad Chapter, organized by Department of CSE of Jaypee Institute of Information Technology, sector 128, Noida, from June 19 to June 23, 2020.
3. Attended online Faculty Development Programme on "Artificial Intelligence", technically sponsored by CSI Ghaziabad Chapter, organized by Department of CSE, IT, MCA, Chaitanya Bharathi Institute of Technology in Collaboration with Braino-Vision India Pvt Ltd., from 22nd May to 26th May, 2020.
4. Attended online Faculty Development Programme on "Emerging Trends in Data Science & IoT ", organized by Department of Computer Science & Information Technology, ARKA Jain University, Jamshedpur Jharkhand held from 20th to 25th July 2020
5. Attended online Faculty Development Programme on "Emerging Trends in the Application of Machine Learning" organized by Dept. of IT, GMRIT held from 20th to 24th July 2020 .
6. Attended Faculty Development Programme on "Data Science in the Digital Era (DSDE)" held from 9th July 2018 to 14th July 2018 at IIIT, Noida.
7. Attended "Workshop on Soft Computing and Language processing" held from 27th April 2018 to 28th April 2018 at IIIT, Noida.
8. Attended "Summer School on Security in Computing SSSIC 2018" held from 25th June 2018 to 7th July 2018 at IIIT Noida.
9. Attended "National Workshop on Computational Intelligence NWCI-2017" held from 1st Dec 2017 to 2nd Dec 2017 at IIIT, Noida.

Reviewer:

1. Reviewer of IET Intelligent Transportation System.
2. Reviewer of IEEE Transaction on Circuits and Systems for Video Technology
3. Reviewer of 21st IEEE International Conference on Intelligent Transportation Systems, held on November 4-7, 2018 at Maui, Hawaii, USA.

4. Reviewer of conference on "Congress on Intelligent System", World Conference in Virtual Format, Organized by Soft Computing Research Society, September 05-06, 2020, India
5. Reviewer of 2nd International Conference on Communication and Intelligent Systems (ICCIS 2020), 26-27 December 2020, India

Contributions in International Conferences:

1. Member of program committee of "Congress on Intelligent System, World Conference in Virtual Format, Organized by Soft Computing Research Society, September 05-06, 2020"
2. Member of Organizing Committee of 2nd International Conference on Communication and Intelligent Systems (ICCIS 2020), 26-27 December 2020.