

## Faculty Profile

**Name** : Dr. Kavita Sheoran  
**Designation** : Associate Professor  
**Qualifications** : Ph.D. ,MTech, B.E.  
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**Email** : Kavita.sheoran@msit.in  
**Area of Interest/Specialization** : Soft Computing, Software Engineering, Algorithm Design and Analysis, Database Management System  
**Experience** : 17 years



### Key Publications

1. K. Sheoran, P. Tomar, R. Mishra, "A novel quality prediction model for component-based software system using ACO–NM optimized extreme learning machine", *Cognitive Neurodynamic* vol. 14(4), pp:502-522, 2020(SCIE).
2. . Tomar, R. Mishra, K. Sheoran, "Prediction of quality using ANN based on Teaching learning optimization in Component based software systems", *Software Practice and Experience*. vol. 48, no. 4, pp. 896-910, 2018(SCIE)
3. G. Dhand and K. Sheoran, "Protocols SMEER (Secure Multitier Energy Efficient Routing Protocol) and SCOR (Secure Elliptic curve based Chaotic key Galois Cryptography on Opportunistic Routing)", *Materials Today: Proceedings*, Vol.37, pp. 1324-1327,2021,(Scopus)
4. K. Sheoran, P. Tomar, R. Mishra, "Software Quality Prediction using Hybrid Classifier based on Improved PSO and ANN", *Journal of Advanced Research in Dynamical and Control Systems* vol. 9, pp.3016-3029, 2017(Scopus).
5. K. Sheoran, P. Tomar, R. Mishra, "Software Quality Prediction Model with the Aid of Advanced Neural Network with HCS", *Procedia Computer Science*, 92, pp.418-424, 2016 (Scopus).
6. Geetika Dhand and Kavita Sheoran, "Evaluate AODV to DSR and Improving AODV", *Journal of University of Shanghai for Science and Technology*, Volume 23(1),pp 247-252 ,Jan 2021
7. Parul Agarwal, Geetika Dhand, Ahmed J. Obaid, Kavita Sheoran "Smart Irrigation with Machine Learning Based Decision Support System", *IJMA*, vol. 10, no. 2, pp. 4003 - 4013, May 2021.
8. Geetika Dhand and Kavita Sheoran, " Ad-Hoc on Android using Wi-Fi Direct", *International Journal of Engineering and Advanced Technology* ,9(6),41-44, Aug20.
9. Kavita Sheoran, "Literacy Rate Analysis", *International Journal of Scientific & Technology Research*, vol. 8 (08), pp. 1306-1312, 2019.
10. Kavita Sheoran, "Windows System Malware Detections", *International Journal of Management, Technology and Engineering*, vol. 9 (07), pp. 468-474, 2019.

11. K. Sheoran, O. P. Sangwan, "Enhancing the Attributes of Software Quality of Component Based Software Using Soft Computing Techniques", ELK Asia Pacific Journal of Computer Science and Information Systems, vol. 1, no. 2, 2015.
12. Kavita Sheoran, "Implementing and Comparing DSR and DSDV Routing Protocols of Mobile Ad-Hoc Networks using NS2 Simulator", International Journal of Computer Applications 92(6):18-24, April 2014 16013-4990 ,ISBN : 973-93-80881-26-7
13. Kavita Sheoran, "Intelligent Transportation System Architecture for a Carpool System". International Journal of Computer Applications 92(2):22-25, April 2014. 15981-4894 ISBN : 973-93-80881-22-4

### **Papers presented in Conferences**

1. S.Malik ,K.Sheoran and G. Dhand , "A System for Providing Insights on a Tourist Spot based on Text Mining ". 4th International Conference on Innovative Computing & Communication (ICICC) 2021.
2. Eeshwaran,Tanya Mittal and Kavita Sheoran, "Serverless computation with nuLambda", 4th International Conference on Innovative Computing & Communication (ICICC) 2021.
3. Maryada, Kirti, Kavita Sheoran and Manvi Gupta , DevSecOps-" A Boon to IT Industry",4th International Conference on Innovative Computing & Communication (ICICC) 2021.
4. Kavita Sheoran, Shivank Awasthi, Ishtdeep Singh Malhi, DevvratTyagi, Shubham Goel, "Introduction to SIDS Neural Network in Game", 8th International Conference on Cloud Computing, Data Science and Engineering, IEEE Confluence 2018, January 2018.
5. K. Sheoran, K Agarwal, A.Gulati "Quality Model for component based E-Commerce application", 3rd International Conference on Computing for Sustainable Global, IEEE Conference 2016.
6. Kavita Sheoran,"Component based quality prediction via Component Reliability using optimal fuzzy classifier and evolutionary algorithm."CSI 2015 50th Golden Jubilee Annual Convention on "Digital Life" at BVICAM, New Delhi on 2nd-5th Dec., 2015.
7. Kavita Sheoran,"Component based quality prediction via Component Reliability using optimal fuzzy classifier and evolutionary algorithm."CSI 2015 50th Golden Jubilee Annual Convention on "Digital Life" at BVICAM, New Delhi on 2nd-5th Dec., 2015
- 8• Kavita Sheoran, 'Secure Compression in Images' ,National Conference on recent Trends in information technology – Computer society of india G.E.C ,Gwalior- 12th -13th april 2008.
- 9• Kavita Sheoran, 'Secure Compression in Images', 2nd National conference on computing for nation development at Bhartiya Vidyapeeth College of Engineering,Delhi-08-09 February,2008
- 10• Kavita Sheoran'Image process and its application', National Conference on issues and challenges in internet and mobile computing at IMR,Gaziabad 28th March,2008
- 11• Kavita Sheoran, 'Data hiding in Digital Images'. 40th Annual Convention of operational Research Society of indiaORSI(04-06 December,2007

## Patent/Copyright

1. Dr. Gaurav Dubey, Mr. Harivans Pratap Singh, Dr. Charu Agarwal, Dr. Vikas Yadav, Dr. Kavita Sheoran, Dr. Prabhjot Kaur Sidhu, Dr. Geetika Dhand, Dr. Anupama Kaushik and Ms. Shaily Malik published a patent titled "IOT Based Smart Shoes for Child Health Monitoring", Patent filed on 20/3/2021, Published on 26/03/2021, Patent No. 202111011966A
2. Mr. Harivans Pratap Singh, Dr. Gaurav Dubey, Dr. Anil Kumar Dubey, Dr. Kavita Sheoran, Dr. Prabhjot Kaur Sidhu, Dr. Geetika Dhand, Dr. Anupama Kaushik, Ms. Geetanjali Sharma published a patent titled, "Method electronic device for monitoring user in work site", patent filed on 20/3/2021, published on 26/03/2021, patent No. 202111011965
3. Mr. Harivans Pratap Singh, Dr. Gaurav Dubey, Dr. Akash Punhani, Dr. Anupama Kaushik, Dr. Prabhjot Kaur Sidhu, Dr. Geetika Dhand, Dr. Kavita Sheoran, Dr. Nishtha Jatana published a patent titled "Method and electronic device for personalizing user activity in virtual reality environment", Patent filed on 20/3/2021, Published on 26/03/2021, Patent No. 202111011967.
4. Parul Aggarwal, M Afshar, Sherin, Geetika Dhand, Amita Yadav, Kavita Sheoran, Sonia Rathee, Tabish Mufti, Faraz Doja, Siddhartha Sankar published a patent titled "Cartoonify Image Detection Using Machine learning", Patent filed on 6/04/2021, Published on 30/04/21, Granted on 5/05/2021, Patent No. 2021101766
5. Mr. Simerneet Singh, Dr. Nishtha Jatana, Dr. Kavita Sheoran, Dr. Geetika Dhand, Mr. Vasu Goel published a patent titled, "Communication Assistance System and Method of operating the system", Patent filed on 15/04/2021 published on 23/04/2021
6. Dr. Prabhjot Kaur Sidhu, Mr. Ronish, Dr. Anupama Kaushik, Dr. Puneet Azad, Dr. Kavita Sheoran, Dr. Kamaljit Singh Saini, Dr. Krishan Pal Chaudhary, published a patent titled "IoT based smart complaint box", Patent filed on 15/01/2021; Published on 22/01/2021, Patent No. 202111001925

## Awards

- **Best Mentorship Award:** is given by Guru Gobind Singh Indraprastha University for year 2016 and 2020 in Inter college project Competition.
- **Best Faculty in CSE Award:** is given by MSIT for year 2014-2015.

## Book Chapter/Books published

1. Kavita Sheoran "Secure Compression In Images", **Lambert Academic Publishing**, ISBN 9783659591204, Aug 2019
2. Mool Chand Sharma, Kavita Sheoran, "**Foundation of Computer Science**", S.K. Kataria & Sons, ISBN 9789383992195, 2016

## Memberships of Professional bodies:

- Registered as a Life Time Member (LM-108179) with Indian Society of Technical Education (I.S.T.E) NEW DELHI.
- CSI (Computer Society of India) Membership No: 01503658

Other Contribution:

- Nodal officer of FIT INDIA MOMEMNT,2021
- Coordinator of UNNAT BHARAT ABHIYAN,2021
- Member college Placement Team,2021
- Member Grievance Cell,2021
- Publicity committee Coordinator in ICAIA 2020(The International Conference on Artificial Intelligence and Applications) organized by MSIT
- Innovation activity committee member under Innovation cell (From Aug 2019 to till date.
- Member of Alumni Committee from Aug 2017 to July 2019.
- Coordinator NSS Cell,2018
- Co convenor in technical fest Avenis 2018.
- HOD(CSE) from Aug 2015-July 2016