Faculty Profile

Name	: Dr. Geetika Dhand
Designation	:Associate Professor
Qualifications	:Ph.D ,M.Tech, B.E.
Phone	: 011-45037193
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Area of Interest/Specialization : Wireless Sensor Network, Computer Networks , Database Management System, Data Structure

Experience : 17 years

Key Publications

1. Geetika Dhand and S.S Tyagi, "SMEER: Secure Multi-tier Energy Efficient Routing Protocol for Hierarchical Wireless Sensor Networks", Wireless Personal Communications, 105(1), pp.17-35, 2019 **(SCI E).**

2. 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)**

3. Geetika Dhand and S.S Tyagi, "SMEER: Secure multi-tier energy efficient routing protocol for location privacy preserving hierarchical wireless sensor networks", Journal of Advanced Research in Dynamical and Control Systems (JARDCS), Vol. 9. Sp– 18, pp 3030-3057, 2017**(Scopus).**

4. Geetika Dhand and S.S Tyagi, "Data aggregation techniques in WSN: Survey", Procedia Computer Science, 92, pp.378-384, 2016 **(Scopus).**

5. 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 , 2021.

6. Geetika Dhand, "Performance Analysis of Machine learning Algorithm for chronic kidney disease",International Journal of all Research education & Scientific methods , Vol 9(1) pp 1988-1992,Jan2021

7. Geetika Dhand ,"Wi-Fi Based Home Automation System ",GIS Science Journal", Vol 8(1), pp 1215-1217, 2021

8. 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.

9. 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.

10. Geetika Dhand and S.S Tyagi, "Performance Analysis of various Routing Protocols in Mobile Ad-hoc Networks", International Journal of Applied Engineering Research (IJAER), Volume 13, Number 10, pp. 7378-7382 ,2018.

11. Geetika Dhand and S.S Tyagi, "Comparison between KMean PSO and K-mean Ant lion optimization", International Journal of Management, Technology and Engineering (IJMTE)", Volume 8, Issue VII, pp 36-39, 2018.

12. Geetika Dhand and S.S Tyagi, "Survey on Data-Centric protocols of WSN", International Journal of Application or Innovation in Engineering & Management (IJAIEM), 2(2), pp 279-284, 2013.

13. Geetika Dhand, Shubhi Ahluwalia , Alind Lali , Arpan Bansal , Kushagr,"An Analysis on K-Means Clustering Algorithm in Data Mining", MSIT Journal of Research –SATYAM, Volume 6, pp22-25, (2017-18)

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. M. Kanela ,H. Dhingra, M. Singhal and G. Dhand, "Secure and Manage Passwords with Encryption and Cloud Storage " , 4th International Conference on Innovative Computing & Communication (ICICC) 2021

3. A.Gautam H.Jain ,A. Senger, G.Dhand, "Battle Royale: First-Person Shooter Game ",4th International Conference on Innovative Computing & Communication (ICICC) 2021

4. Geetika Dhand and S.S Tyagi, "Cluster head Techniques: Survey", in the INDIACom-*2018* held at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM) on 14th - 16th March 2018 .

5. Geetika Dhand "Comparison of Different digital watermarking Techniques" in National Conference on recent Trends in information technology – Computer society of India, G.E.C, Gwalior-12th -13th April 2008.

6. Geetika Dhand "Effect of noise on watermarking techniques" in National seminar on information Superhighway: A road to excellence, Delhi Institute of Advanced Studies Delhi-15th March ,2008.

7. Geetika Dhand "Information Hiding Techniques" in 2nd National conference on computing for nation development-The Institution of Electronics and Telecommunication, (IETE, Delhi Centre), Bharati Vidyapeeth Delhi-INDIACOM2008(08-09 Februrary,2008)

8. Geetika Dhand "Data hiding in Digital Images" in Indian National Science Academy-ORSI (04-06 December,2007).

9. Geetika Dhand and S.Anis "Regression testing" in National conference on computing for nation development-The Institution of Electronics and Telecommunication, (IETE, Delhi Centre), Bharati Vidyapeeth Delhi-INDIACOM2007(23-24 Februrary,2007).

10. Geetika Dhand, "Object oriented Software Engineering" National conference on computing for nation development-The Institution of Electronics and Telecommunication, (IETE, Delhi Centre), Bharati Vidyapeeth Delhi-INDIACOM2007(23-24 February 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 Patent no.202111017478

6. Dr. Gaurav Dubey , Dr. Monika Arora , Dr. Prabhjot Kaur , Dr. Geetika Dhand , Dr. Kavita Sheoran, Dr. Anupama Kaushik , Pooja Kherwa , Sonika Malik , Preeti Rathee METHOD FOR TRANSLATING SIGN LANGUAGE USING CONVULUTIONAL NEURAL NETWORK (Patent filed on 15/09/2021 & Published on 15/10/2021, Application No: 202111041578, The Patent Office Journal No. 42/2021 dated 15/10/2021)

Book Chapter/Books published
- Geetika Dhand "Information Hiding-watermarking",Lambert Academic Publishing, ISBN 978-620-0-65380-2, Feb 2020.

Memberships of Professional bodies:
- Life Member(LM-108180) with Indian Society for Technical Education (ISTE) .

Awards /Recognitions and Achievements
- Recognized as Innovation Ambassador by MHRD
- AICTE certified Mentor for inductee teachers.
- Received Letter of Appreciation for sharing the valuable knowledge on "Introduction of Fuzzy & its Applications" under aegis of the Five day Lecture series from 18 to 22 Dec 2017 held at MSIT, New Delhi.

Other Contribution

- **Nodal officer** of all type Scholarship scheme(2021-till date)
- Sponsorship committee **Coordinator** in ICAIA 2020(The International Conference on Artificial Intelligence and Applications) organized by MSIT
- **Co convener** in Technical fest Avensis 2020, Avensis 2018 and Avensis 2011
- Innovation activity committee **coordinator** under Innovation cell (From Aug 2019 to till date.)
- **Co -convenor** of Alumni Committee from Aug 2017 to July 2019.
- **Convenor** of Alumni committee from Aug 2016 to July 2017.
- Participated as **Session Chair** in the 4th International conference on Innovative computing and communication(ICICC-2021) organized by Shaheed Sukhdev College of business studies,University of Delhi, in association with National Institute of Technology Patna and University of Valladolid, Spain on 20th -21st Feb 2021
- Participated in International conference on Computational Research and Data Analytics (ICCRDA) 2020 , as **Session Chair** held on 24 October 2020.
- Participated in International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS) 2020, as **Session Chair** held on 2-4 July 2020.
- Participated in the International Conference on Innovative Computing and Communication (ICICC-2020), as **Session chair** held on Feb 21-23 2020.