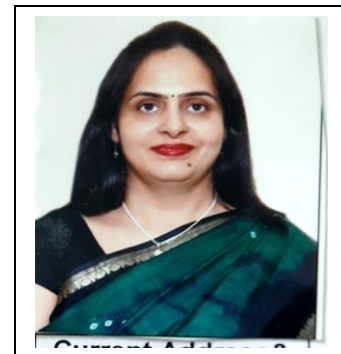# Faculty Profile

Name	: Dr. Vimal Gaur
Designation	: Associate Professor
Qualifications	: Ph.D (Maharishi Markandeshwar (Deemed to be University), Ambala M.Tech (GGSIPU, New Delhi), B.Tech (N.C.College of Engineering, Affiliated to Kurukshetra University, Kurukshetra)
Phone	: 9999620069
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Area of Interest/Specialization: Artificial Intelligence, Machine Learning

Experience   : 20 years

Key Publications

1. V.Gaur, R.Kumar,"Analysis of Machine Learning Classifiers for Early Detection of DDoS Attacks on IoT Devices". *Arabian Journal for Science and Engineering*, 47, 1353–1374 (2022). https://doi.org/10.1007/s13369-021-05947-3.

2. V.Gaur, B.Singh, Deepak, M. A., & Mishra, N,"Estimation of Various Scalar Multiplication Algorithms in ECC" International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8, Issue-6S4, April 2019 183 Published By: Blue Eyes Intelligence Engineering & Sciences Publication Retrieval Number: F10360486S419/19©BEIESP DOI: 10.35940/ijitee.F1036.0486S419.

3. V.Gaur, R.Kumar,"M-LSTM: Multiclass Long Short-Term Memory based approach for Detection of DDoS Attacks." *Mathematical Statistician and Engineering Applications* 71.3s2 (2022): 1375-1394.

4. V.Gaur, R.Kumar,"HPDDoS: A HyperParameter Model for Detection of Multiclass DDoS Attacks." *Mathematical Statistician and Engineering Applications* 71.3s2 (2022): 1444-1470.

5. V.Gaur, A.Singh, & A.Chaturvedi, "Authentication using a Combination of Color Scheme and Musical Notes" International Journal of Engineering Research & Technology (IJERT) 2017, 5(10), ISSN: 2278-0181**.**

6. **V.Gaur,** K.Khurana, Girija, S.Chopra, (2010)"Performance Evaluation of Ant based Clustering", IMS Manthan (The Journal of Mgt., Comp. Science and Journalism) Volume 5, Issue 1, 49-52, ISSN 0974-7141

Papers presented in Conferences

1.**V.Gaur**, R. Dwivedi, Pankhuri, S. Dhar,"Conversion of Sign Language into Devanagari Text Using CNN" 2022.In: Gao, XZ., Tiwari, S., Trivedi, M.C., Singh, P.K., Mishra, K.K. (eds) Advances in Computational Intelligence and Communication Technology. Lecture Notes in Networks and Systems, vol 399. Springer, Singapore. https://doi.org/10.1007/978-981-16-9756-2_8 **Springer,** SCOPUS Enlisted.

2. **V.Gaur**, Shivam, R.Bhatt, S.Tripathi,"Design and Development of Loan Predictor Using Machine Learning" In: Iyer, B., Crick, T., Peng, SL. (eds) Applied Computational Technologies. ICCET 2022. Smart Innovation, Systems and Technologies, vol 303. Springer, Singapore. https://doi.org/10.1007/978-981-19-2719-5_11. **IEEE,** SCOPUS Enlisted.

3. **V.Gaur** and R.Kumar,"DDoSLSTM: Detection of Distributed Denial of Service Attacks on IoT Devices using LSTM Model," 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), Chennai, India, 2022, pp. 01-07, doi: 10.1109/IC3IOT53935.2022.9767889. **IEEE,** SCOPUS Enlisted.

4. **V.Gaur** and R.Kumar,"ET-RF based Model for Detection of Distributed Denial of Service Attacks," 2022 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), Erode, India, 2022, pp. 1205-1212, doi: 10.1109/ICSCDS53736.2022.9760938. **IEEE,** SCOPUS Enlisted.

5. **V.Gaur** and R.Kumar,"FSMDAD: Feature Selection Method for DDoS Attack Detection," 2022 International Conference on Electronics and Renewable Systems (ICEARS), Tuticorin, India, 2022, pp. 939-944, doi: 10.1109/ICEARS53579.2022.9752308. **IEEE, SCOPUS Enlisted.**

6. **V.Gaur**, R.Kumar,"GDH Key Exchange Protocol for Group Security among Hypercube Deployed IoT Devices" (2020) In: Marriwala, N., Tripathi, C.C., Kumar, D., Jain, S. (eds) Mobile Radio Communications and 5G Networks. Lecture Notes in Networks and Systems, vol 140. Springer, Singapore. https://doi.org/10.1007/978-981-15-7130-5_50. **Springer, SCOPUS Enlisted.**

7. **V.Gaur** and R. Kumar, "HCTDDA: Hybrid Classification Technique for Detection of DDoS Attacks," 2021 5th International Conference on Information Systems and Computer Networks

(ISCON), Mathura, India, 2021, pp. 1-5, doi: 10.1109/ISCON52037.2021.9702399. **Springer, SCOPUS Enlisted.**

8. V.Gaur, R.Kumar, A.Mehta, N.Gupta, R.Bansal" Enhanced Digital Image Encryption using Sine Transformed Complex Chaotic Sequence" in 1st International Conference on Artificial Intelligence and Applications 2020" on Feb 06-07,2020. doi:10.1007/978-981-15-4992-2_15. **Springer, SCOPUS Enlisted.**

9. V.Gaur and D.Mehra and A.Aggarwal, and R.Kumari and S.Rawat,"Quantum Key Distribution: Attacks and Solutions" (March 28, 2020). Proceedings of the International Conference on Innovative Computing & Communications (ICICC) 2020, Available at SSRN: https://ssrn.com/abstract=3563118 or http://dx.doi.org/10.2139/ssrn.3563118 "Quantum Key Distribution: Attacks and Solutions" in 3rd International Conference on Innovative Computing and Communication (ICICC-2020) on 25 Feb, 2020. **Springer.**

10. V.Gaur, D.Mehra, A.Agrawal,"Image Encryption using Double Random Phase Encoding and Elliptical Curve Cryptography*" in International Conference on "Computing for Sustainable Global Development" IEEE Conference ID 42835 at BVICAM on* 1-3 March,2017 ISBN NO. 978-93-80544-24-3. **IEEE.**

National Conferences

1. V.Gaur, S.Bhatnagar,"Software Requirement Specification and Analysis" Proceedings of National Conference, INDIACom-2007 Computing for Nation Development, Feb 23-24, 2007. ISSN 0973-7529 and ISBN 978-81-904526-0-1

2. S.Chowdhary, V.Sharma, A.B. Patki, **V.Gaur**,"Cyber crime management using evidence based software engineering -banking and insurance industries", Proceedings of 4th National Conference, INDIACom-2010 Computing for Nation Development, Feb 25-26, 2010, ISSN 0973-7529 and ISBN 978-81-904526-9-4.

3. S.Chowdhary, S.Joshi, T.Patki, V.Sharma, A.Chowdhary, A.B. Patki, **V. Gaur**," Role and scope of support vector machine in Bioinformatics", Proceedings of 4th National Conference, INDIACom-2010 Computing for Nation Development, Feb 25-26, 2010. ISSN 0973-7529 and ISBN 978-81-904526-9-4.

Book Chapters/Books Published

1. **Vimal Gaur**, "Making Great Strides Towards Road Detection" in Recent Advances and Block chain Technology book with pp 158-169, doi: [10.2174/9789815051605122040009](10.2174/9789815051605122040009). ISBN-978-981-5051-61-2.

Patent/Copyright

1. **V. Gaur**, R. Kumar, A. Aggarwal, M. Chhabra," A system of two level model for early detection of DDOS attacks on IOT devices using optimal feature selection and machine learning classifiers," Intellectual Property India.

Other Contributions

1. Received Excellence in Branch Counseling Award from Delhi Section IEEE for Outstanding Service in 2011 as the Branch Counselor of MSIT, Janakpuri.

2. Received certificate of merit for guiding a project entitled "Empirical Evaluation of Hausdroff Distance for Image Matching" and secured third position in Inter College Project Competition for affiliated engineering institutes of GGSIPU held on 17 May, 2012.

3. IEEE Branch Counselor: Dec 2010- April 2013.

4. NBA (National Board Accreditation) Coordinator at Department Level: Aug 2015- July 2018.

5. NAAC/IQAC Member: Aug 2018- Aug 2023

6. ISO Certification Convener: Sep 2023- till date

7. Received certificate of excellence in research for an outstanding contribution to the quality of research (year 2022).

Other Contributions:

1. Participated in the International Conference on Artificial Intelligence: Theory and Applications (AITA-2023),as **Session chair** held on 11-12 Aug 2023.

2. Participated in the International Conference on Advances in Data Driven Computing and Intelligent Systems,as **Session chair** held on 21-23 September 2023.

3. Participated in the International Conference on Intelligent Vision and Computing,as **Session chair** held on 25-26 November 2023.

4. Participated in the International Conference on Computational Intelligence and Mathematical Applications ,as **Session chair** held on 21-22 December 2023