



## MANAV RACHNA UNIVERSITY, FARIDABAD

Sector 43, Aravalli Hills, Manav Rachna Campus Rd, Faridabad, Haryana 121004

### Dr. Susmita Ray

**Designation:** Professor  
**Qualifications:** Ph.D.(Computer Science)  
**Email:** susmita@mru.edu.in  
**Experience:** 32 Years



**Research Interest:** Machine Learning, Deep Learning, Computer Vision, Modeling Diagrammatic Representation Systems

#### + Conference Publications:

Susmita Ray, P. Peelman and J. Paredaens (June 1994) **“Clarifying the Structure of Complex Venn Diagrams”**, Proceedings of Conference on Advanced Visual Interfaces, Bari, Italy, ACM Digital Library, pp 216–218, DOI: <https://doi.org/10.1145/192309.192352>

Dr. Susmita Ray, (2019) **“A Quick Review of Machine Learning Algorithms”**, Proceedings of International Conference, ComITCon 2019, MRIIRS, Faridabad, 14-16 February, 2019, IEEE Xplore, pp 41-45  
DOI: <https://ieeexplore.ieee.org/document/8862451>

Dr. Susmita Ray(2020), **“An Analysis of Computational Complexity and Accuracy of two Supervised Machine Learning Algorithms – K-Nearest Neighbor And Support Vector Machine”**, Proceedings of International Conference on Data Management, Analytics and Innovation (ICDMAI 2020), New Delhi, 17-19 January 2020, Springer AISC Series, Vol. 1174, pp 335-347, DOI: [https://doi.org/10.1007/978-981-15-5616-6\\_24](https://doi.org/10.1007/978-981-15-5616-6_24)

Ms. Deepti, Dr. Susmita Ray(2020), **“A Survey on Application of Machine Learning Algorithms in Cancer Prediction and Prognosis”**, Proceedings of International Conference on Data Management, Analytics and Innovation (ICDMAI 2020), New Delhi, 17-19 January 2020, Springer AISC Series, Vol. 1174, pp. 349-361, DOI: [https://doi.org/10.1007/978-981-15-5616-6\\_25](https://doi.org/10.1007/978-981-15-5616-6_25),

Manoj Kumar, Dr. Susmita Ray, Dr. Dileep Kumar Yadav (2020), **“A survey on object motion detection in video using a moving camera for smart surveillance system”**, presented in International Conference on Machine Intelligence and Data Science Applications (MIDAS-2020), UPES Dehradun, 4-5 September 2020, Proceedings to be published in Springer’s Algorithms for Intelligent Systems Series

Manoj Kumar, Dr. Susmita Ray, Dr. Dileep Kumar Yadav(2020), **“Role of AI/ML for Vehicle Detection and Tracking in Highways and Transportation System”**, presented in International Conference on Network and Cryptology, NETCRYPT-2020, JNU, New Delhi, 4-6 December, 2020

Ms. Deepti, Dr. Susmita Ray(2021), **“A Review on Application of Machine Learning and Deep Learning Algorithms in Head and Neck Cancer Prediction and Prognosis”**, presented in International Conference on Data Management, Analytics and Innovation (ICDMAI 2021), 15-17 January 2021, Proceedings to be published in Springer’s AISC Series

#### + Research Supervised(PhD):

Manoj Kumar on **“Automatic Detection of Moving Object for Smart Surveillance System”** Year - 2019 (Ongoing)

Deepti on **“Developing Deep Neural Network Models for Prediction and Prognosis of Head and Neck Cancer”** Year - 2019 (Ongoing)

Jayati Relan on **“Prediction of Parkinson’s Disease- Machine Learning based approach”** Year - 2019 (Ongoing)

Neha Jain on **“Big Data in EHR: Managing Security Issues ”** Year - 2020 (Ongoing)

Neetu Aggarwal on **“Predictability of Agriculture Produce at Regional India Level: Neural Network Based Modeling”** Year - 2020 (Ongoing)

**+ Administrative Responsibilities:**

Chairperson of Departmental Research Committee of Computer Science & Technology department of MRU from 20<sup>th</sup> August 2018 till date

Member of University Research Council of MRU from 5<sup>th</sup> April 2019 till date

President of Institution Innovation Council of MRU from 23<sup>rd</sup> October 2018 till date

Member of Board of Faculty for Faculty of Engineering of MRU from 3<sup>rd</sup> April 2019 till date