

Prof. Monica Mehrotra

Professor
Department of Computer Science
Jamia Millia Islamia

Brief Resume:

Prof. Monica Mehrotra is presently working as Professor in the Department of Computer Science, Jamia Millia Islamia (Central University). She completed her Ph.D. in Aug. 2007 from Jamia Millia Islamia. She has over twenty- five years of teaching experience. Her research interest areas include Data Mining, Information Retrieval and Social network analysis. Nine scholars have completed PhD under her guidance. Eight scholars are enrolled under her supervision for PhD. She has authored two books published by Narosa Publishers titled ‘Principles and practices of Software Engineering’ and ‘Software Project Measurement: Tools and Techniques’. She has published over 70 papers in International conferences & Journals of repute. She has won ‘Excellent Researcher Award (female)’ in 2nd International academic and research excellence awards (IARE – 2020) ceremony organized by GISR foundation on 3rd Oct, 2020. She is a member of IEEE.

I. Personal Profile:

Designation: Professor
Department: Computer Science, Jamia Millia Islamia (Central University), New Delhi
E-mail address: drmehrotra2000@gmail.com, mmehrotra@jmi.ac.in

II. Educational Profile:

<i>S. No.</i>	<i>Exam. Passed (Year)</i>	<i>Board/Univ.</i>	<i>% marks</i>	<i>Division</i>
1.	Ph D (Aug. 2007)	Jamia Millia Islamia	PhD awarded	-
2.	MCA (1992)	IET, Lucknow Univ.	9.09/10	FIRST
3.	B Sc (1989)	Lucknow Univ.	60%	FIRST
4.	XII (1985)	CBSE	74.5%	FIRST
5.	X (1983)	ICSE	78.16%	FIRST

III. Employment profile: Total teaching experience of over 23 years

S. No.	Position	From	Till	Organization
1	Professor	Oct 2017	Present	Deptt. Of Computer Sc., JMI
2	Associate Prof.	Oct. 2014	Oct 2017	Deptt. Of Computer Science, Jamia Millia Islamia, ND
3	Asst. Prof. (Stage III)	Oct 2011	Oct 2014	Deptt. Of Computer Sc., Jamia Millia Islamia, ND
4	Asst. Prof. (Stage II)	Oct 2006	Oct 2011	Deptt. Of Computer Sc, Jamia Millia Islamia, ND
5	Lecturer	Oct 2000	Sept 2006	Deptt. Of Computer Sc., Jamia Millia Islamia, ND
6	Lecturer	Aug 1999	Sept 2000	Maharaja Agrasen College, Delhi Univ., ND
7	Sr. Systems Analyst	July 1998	July 1999	JSS Academy of Technical Education, NOIDA
8	Asst. Prof.	July 1996	Dec 1997	IT Deptt., Amity Business School, NOIDA
9	Project Fellow (Teaching)	Sept 1995	May 1996	LD Engg. College, Ahmedabad

IV. Specialization and Research Interests:

(A) My research:

Submitted Thesis titled “Neural Network based Information Retrieval Systems” in June, 2006 and PhD awarded in Aug, 2007. Research work supervised by Prof. S.I. Ahson, Former HOD, Department of Computer Science, Jamia Millia Islamia, New Delhi.

(B) Current Research Areas:

- Data Mining & Analytics
- Data Science
- Information Retrieval

- Social Network Analysis

(C) Research Completed :

- Nahla Ibraheem was awarded PhD for her work on ‘Application of Fuzzy neural Network in Digital Image Clustering’ in Jan, 2010.
- Muna Taher – ‘Enhanced Design of an Intrusion detection System’, degree awarded in May 2012.
- Sangeetha – ‘In Silico identification of potential inhibitors of drug targets in Plasmodium falciparum and design of target oriented virtual compound library’. – degree awarded in May 2012.
- Mukta Narang – ‘Measuring the security intensity of a software system using a security metrics’ degree awarded in Nov, 2013.
- Kalpana – ‘A component-based Ontology Engineering framework for better alignment and interoperability of the Semantic Web’, degree awarded in June, 2013.
- Sapna Varshnay - Her topic of research is ‘Use of Metaheuristic Optimization and Data Mining Methods for Automatic Generation of Effective Test Cases’ since Sept 2012. Thesis submitted in Nov 2016 and degree awarded on 25th April, 2017.
- Monika Singh is working in area of ‘Efficient mining techniques for enhanced design of Recommender Systems’ since Sept 2013. Thesis submitted Sept 2018 and awarded on 4th Sept, 2019.
- Seema Gupta is working in area of ‘Effective predictions from unstructured data using data mining algorithms’ since Sept 2014. Thesis submitted on 4th April, 2019. Thesis awarded on 6th Nov, 2019.
- Ajay Rastogi is working in area of ‘Detection of Opinion Spam in Online Social Media’ since Sept 2014. Thesis submitted in Sept 2020. Thesis awarded on 15th Jan 2021.

(D) Current supervision:

- Shivangi Chawla is working in area of ‘Emotion mining of social media and its impact analysis’ since Sept., 2015.
- Shamsul-haq-ansari is working since Sept, 2017 in area of ‘A semantic framework for smart cities’.

- Surbhi Kakkar is working since Jan 2018. Her topic is ‘Information Diffusion in online social networks’.
- Deepali Dhaka is working since Jan 2018. Her topic is ‘Spammer Detection in Online Social Networks’.
- Rachna Sethi is working since Oct 2018. Her topic is ‘Cold start problem in Recommender Systems’.
- Saima Siddiqui is working since October 1919.
- Ovais Gashroo is working since October 1919.

V. List of Publications:

(A) Journal Papers/Book Chapters:

[1] Kalpana Nigam and **Monica Mehrotra**, ‘***Aligning Ontologies Intelligently***’, International Journal Of Computer Science and Communications(IJCSC), (ISSN 0973-7391), Vol. 3, No. 1, January-June 2012, pp. 61-66.

<https://pdfs.semanticscholar.org/cbef/4c0e174812bb5ca085544555437e5e64538d.pdf>

[2] Muna M. T. Jawhar and **Monica Mehrotra**, ‘***System Design for Packet Sniffer using NDIS Hooking***’, publish in the International Journal of Computer Science and Communication (online ISSN: 0973-7391), pp. 169-171. Published by Serials Publications in Jan 2010.

[3] Muna M. T. Jawhar and **Monica Mehrotra**, ‘***Anomaly Intrusion Detection System using Hamming Network Approach***’, publish in the International Journal of Computer Science and Communication (online ISSN: 0973-7391), pp. 163-167. Published by Serials Publications in Jan 2010.

<http://csjournals.com/IJCSC/PDF1-1/32.pdf>

[4] Kalpana Nigam and **Monica Mehrotra**, ‘***Ontology Mediation with Machine Learning: Survey and Analysis***’, International Journal of Computer Science and Intelligent Computing (IJCSIC) (ISSN: 0976-9250), September Issue, 2010, pp. 33-39.??

[5] SangeethaSubramanium, **Monica Mehrotra**& Dinesh Gupta, ‘***Virtual High Throughput Screening (vHTS) – A perspective***’, in Bioinformation Journal (Online ISSN 0973-2063; Print ISSN 0973-8894) is a scientific journal publishing research

articles in biological knowledge discovery after full peer review. pp. 14-17.(UGC 47005)
(ESCI web of science)

Doi- [10.6026/97320630003014](https://doi.org/10.6026/97320630003014)
<http://www.bioinformation.net/003/000300032008.pdf>

[6] Muna M T Jawhar&**Monica Mehrotra**, '*Design Network intrusion Detection System using hybrid Fuzzy-Neural Network*', International Journal of Computer Science and Security, Volume (4), issue(3).pp 285-294. 2010, Kuala Lumpur, Malaysia.ISSN: 1985-1553.

<http://www.cscjournals.org/manuscript/Journals/IJCSS/Volume4/Issue3/IJCSS-288.pdf>

[7] Subramaniam, S.; **Mehrotra, M.**; Gupta, D.,'*Support Vector Machine Based Classification Model for Screening Plasmodium falciparum Proliferation Inhibitors and Non-Inhibitors*'. Biomedical Engineering and Computational Biology, 2011, pp. 13-24.doi: 10.4137/BECB.S7503.(UGC 16181) (ESCI)

<https://journals.sagepub.com/doi/10.4137/BECB.S7503>

doi: 10.4137/BECB.S7503

[8] Subramaniam, S.; **Mehrotra, M.**; Gupta, D., '*Support Vector Machine based prediction of P. falciparum proteasome inhibitors and development of focused library by molecular docking*'. Combinatorial Chemistry & High Throughput Screening 2011,14(10).898-907. (SCIE) (Scopus)

DOI: [10.2174/138620711797537058](https://doi.org/10.2174/138620711797537058)

<http://www.eurekaselect.com/75339/article>

[9] MuktaNarang& **Monica Mehrotra**, '*Security Issue – A Metric Perspective*' in International Journal of IT and Knowledge Management, July- December 2010, Volume 2, no. 2, pp. 567-571, ISSN - 0973-4414.

<http://www.csjournals.com/IJITKM/PDF%203-1/78.pdf>

[10] MuktaNarang&**Monica Mehrotra**, '*A novel approach to measure security – CIAAAN*' in Journal of Computing, volume 3, issue 6, June 2011, pg 143 – 153, ISSN 2151-9617.

<https://www.scribd.com/document/59517643/A-Novel-Approach-for-Measuring-Security-in-Software-Systems-CIAAAN>

[11] MuktaNarang&Monica Mehrotra, '*Security Measurement Framework – A Network Perspective*' in International Journal of Advanced Research in Computer Science, volume 2, No. 4, July- August 2011, pages 281 – 284, ISSN 0976-5697 (ICV – 5.47)

<https://www.ijarcs.info/index.php/Ijarcs/article/view/632/620>

[12] Muna M T Jawhar&Monica Mehrotra, '*Implementation and Enhancing the design of Signature-based Intrusion Detection Model*', accepted in Journal of Computer Science and Engineering, Volume 11, Issue 2, February 2012.

[13] Subramaniam, S., Mehrotra, M. and Gupta, D., '*Development of target focused library against drug target of P. falciparum using SVM and Molecular docking*'. (Journal of Cheminformatics) (ISSN: 1386-2073).

<https://jcheminf.biomedcentral.com/articles/10.1186/1758-2946-4-S1-P48>

[14] MuktaNarang and Monica Mehrotra, '*Measuring software security intensity using the Security Measurement framework*', International Journal of Computer Science and Technology, Volume 4, Issue 1, pp. 392-398, Cosmic Journals, ISSN : 2229-4333, Jan-March 2013.

<http://ijcst.com/vol41/3/mnarang.pdf>

[15] Kalpana and Monica Mehrotra, '*Finding Best Probable Combinations of Similarity Measures Using Bayesian Networks*', International Journal of Computer Science and Technology, Volume 4, Issue 2, pp. 395-400, Cosmic Journals, ISSN : 2229-4333, Apr-June 2013.

<http://ijcst.com/vol42/3/kalpana.pdf>

[16] SapnaVarshnay and Monica Mehrotra, '*Search based Software Test Data Generation for Structural Testing: A Perspective*' published in ACM SIGSOFT Software Engineering Notes, July 2013 Volume 38 Number 4, pp.1-6. ISSN:0163-5948.(UGC 46814)

<https://dl.acm.org/citation.cfm?doi=2492248.2492277>

[17] SapnaVarshnay and Monica Mehrotra, '*Automated Software Test Data Generation for Data Flow Dependencies using Genetic Algorithm*' Published in International Journal of advanced research in Computer Science and Software

Engineering, Feb 2014. Volume 4, Issue 2, February 2014. ISSN: 2277 128X, pp.472-479.

http://ijarcsse.com/Before_August_2017/docs/papers/Volume_4/2_February2014/V4I2-0396.pdf

[18] Monika Singh and **Monica Mehrotra**, '*Recommendation Systems: An Insight*' Published in International Journal of advanced research in Computer Science and Software Engineering, Feb 2014. Volume 4, Issue 2, February 2014 ISSN: 2277 128X, pp. 879-883. (Impact factor: 2.08)

http://ijarcsse.com/Before_August_2017/docs/papers/Volume_4/2_February2014/V4I2-0452.pdf

[19] Jawhar MMT & **Mehrotra M.** '*A hybrid FCM clustering- neural network model for intrusion detection*'. International Journal of Advanced Materials Research. 2012;403–408: 3519–3527. doi: 10.4028/www.scientific.net/amr.403-408.3519. ISSN : 0935-9648 (Print)

[20] NI Jabbar & **M Mehrotra** '*Application of fuzzy-neural network for image tumor description*', World Academy of Science, Engineering and Technology Vol.44, 575-577, 2008. ISSN: 2010-376X (Print) 2010-3778 (Electronic).(Scopus)

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.193.1921&rep=rep1&type=pdf>

[21] AK Goel, R Sindhu, **M Mehrotra**, GN Purohit, '*Managing unstructured data using agent technology*', Ubiquitous computing and communication journal 45 (3), 801-806. ISSN 1992-8424.(UGC – 19928424).

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.499.8434&rep=rep1&type=pdf>

[22] Seema Rani, Monica Mehrotra, '*Identification of communities from Social Networks*'. Published in International journal of innovative research in computer science and technology, pp. 130-133, ISSN: 2347-5552, Vol.3, Issue-3, May 2015. JIF- 3.5

http://www.ijircst.org/DOC/28_IRP372913f470f-22fc-4213-8502-184d00eaa925.pdf

[23] Sapna Varshney and **Monica Mehrotra**, '*An improved PSO-based test data generator for data flow coverage*'. Published in International journal of applied engineering research, ISSN 0973-4562, Vol. 10 No.55 (June 2015), pp. 2329-2336. (Scopus indexed journal).(UGC 64529)

https://www.researchgate.net/publication/283744817_An_improved_PSO-based_test_data_generator_for_data_flow_coverage

[24] Sapna Varshney and **Monica Mehrotra**, '*Search based test data generator for data-flow dependencies using dominance tree concepts, branch distance and elitism*'.

Published in Arabian Journal for Science and Engineering (Springer Journal), ISSN 1319-015-1921-5 on 27th October, 2015, pp. 1-29.’(Scopus)

<https://link.springer.com/article/10.1007/s13369-015-1921-5>

[25] ShivangiChawla and **Monica Mehrotra**, ‘*Social emotion mining: An insight*’ published in International journal of advanced engineering research and science, vol 3, issue 9, pp. 25-29, Sept 2016. ISSN: 2349-6495(P), 2456-1908(O). Impact factor – 4.192, Thomas Reuter Indexed journal.

<https://doi.org/10.22161/ijaers/3.9.5>

[26] SapnaVarshney, **Monica Mehrotra**, CharuSaini, ‘*An adaptive PSO-based approach for data flow coverage of a program*’, published in International journal of engineering research and technology (IJERT),pp. 281-288, ISSN : 2278-0181,Vol 6 , Issue 02, Feb 2017. Journal impact factor – 1.76. (Scopus)

<http://www.ijert.org/research/an-adaptive-pso-based-approach-for-data-flow-coverage-of-a-program-IJERTV6IS020143.pdf>

[27] Ajay Rastogi and **Monica Mehrotra**, ‘*Opinion spam detection in online reviews*’ published in Journal of Information & Knowledge Management (JIKM) Vol. 16, issue No. 4, pp.1-38, (2017) 1750036 (38 pages), World Scientific Publishing Co. DOI: 10.1142/S0219649217500368. Published on 20 Nov, 2017. ISSN (online) 1793-6926 .(UGC 30174) (ESCI & Scopus)

<https://doi.org/10.1142/S0219649217500368>

[28] ShivangiChawla and **Monica Mehrotra**, ‘*A conceptual model for understanding the impact of textual emotion mining*’, published in International Journal of Advanced Research in Computer Science, Volume 9, No. 1, Jan-Feb 2018, pp.860-863. ISSN No. 0976-5697. (UGC 2503)

<https://doi.org/10.26483/ijarcs.v9i1.5472>

[29] Monika Singh and **Monica Mehrotra**, ‘*Impact of Clustering on quality of recommendation in Cluster based Collaborative Filtering*’, published in International Journal of Business Intelligence and Data Mining, published by Inderscience Publishers.(Scopus indexed)

DOI:[10.1504/ijbidm.2019.10013538](https://doi.org/10.1504/ijbidm.2019.10013538)

[30] Monika Singh&**Monica Mehrotra**, ‘*Impact of Biclustering on the Performance of Biclustering based Collaborative Filtering*’, published online on 5 June, 2018.ion in

Expert Systems with Applications, publisher-Elsevier(2018) **443-456. (Scopus and SCIE indexed, Impact factor: 3.928).**

[31] Md. Shamsul Haque Ansari and **Monica Mehrotra**, '*IoT applications in smart cities*', published in International journal of innovation and advancement in Computer Science. ISSN 2347-8616, Vol 7, Issue 4, April 2018, pp. 577-584.

<http://www.academicscience.co.in/admin/resources/project/paper/f201804301525069208.pdf>

[32] Seema Rani & **Monica Mehrotra**, 'Community detection in Social Networks: Literature review', published in World Scientific 'Journal of Information and Knowledge management', Vol.18, No.02, 1950019(2019). (Scopus, World Scientific).

<https://www.worldscientific.com/doi/abs/10.1142/S0219649219500199>

[33] Seema Rani & **Monica Mehrotra**, 'Determining network communities based on modular density optimization', accepted for publication in Journal 'Recent patents on Computer Science'. Special issue – recent innovations and advancements in swarm intelligence: Algorithms, methodologies and applications, 2019. Vol. 12, pp. 1-9. **doi: 10.2174/2213275912666181205153024.** (Scopus, Bentham Science).

<http://www.eurekaselect.com/168093/article>

[34] Sapna Varshney and **Monica Mehrotra**, 'A Hybrid Particle Swarm Optimization and Differential Evolution Based Test Data Generation Algorithm for Data-Flow Coverage Using Neighbourhood Search Strategy' published in Informatica Journal. Vol 42, No 3, pp. 417-438. (2018). ISSN (print) - 0868-4952. (Scopus).

<https://doi.org/10.31449/inf.v42i3.1497>

[35] Md. Shamsul Haque Ansari and Monica Mehrotra, 'Development of smart cities and its sustainability: A smart city framework' published in International journal of Innovative Technology and Exploring Engineering. ISSN: 2278-3075, Vol. 8, Issue-11, Sept 2019. Published by blue eyes engineering and sciences publication. (Scopus)

[36] Seema Rani & Monica Mehrotra, 'A Discrete Bat Algorithm for Clustering Social Networks' published in International Journal of Computers and Applications. Publishing house Taylor and Francis Online. Print ISSN: 1206-212X Online ISSN: 1925-7074. (Scopus)

[37] Surbhi Kakkar & Monica Mehrotra, 'A review of critical research areas under information diffusion in social networks' published in International Journal of Advanced Computer Science and Applications, Vol.11, No.4, May, April 2020. pp.383-396. ISSN : 2156-5570

(Online).(Scopus and web of science).

https://thesai.org/Downloads/Volume11No4/Paper_54-A_Review_of_Critical_Research_Areas.pdf

[38] Seema Rani & Monica Mehrotra, 'Clustering social networks using Nature-inspired BAT Algorithm' published in International Journal of Advanced Computer Science and Applications, Vol.11, No.4, May 2020, pp.115-125. ISSN: 2156-5570 (Online). (Scopus and web of science).

[39] Ajay Rastogi & Monica Mehrotra, 'Effective Opinion Spam Detection: A Study on Review Metadata Versus Content', in Journal of Information and Data Science (JDIS), Vol.5, Issue 2, pp.76-110, Walter De Gruyter Publishers, 2020. ISSN (online): 2543-683X, 2020.

DOI: <https://doi.org/10.2478/jdis-2020-0013> (ESCI and Scopus Indexed)

[40] Shamsul Ansari & Monica Mehrotra, 'Development of Smart Cities and Its Sustainability: A Smart City Framework' published in International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-11, September 2019 646 Published By: Blue Eyes Intelligence Engineering & Sciences.(Scopus).

DOI: 10.35940/ijitee.K1703.0881119

(B) International Conference Papers:

[1] **Monica Mehrotra** & S.I.Ahson, '*Neural Network Based Information Retrieval System*', paper accepted at **IEEE International Conference IRI-2005**, Las Vegas, USA, Aug 2005.

[2] **Monica Mehrotra** & S.I.Ahson, '*Text Retrieval with Self Organizing maps*', in Proceedings of **IEE International Conference** on Intelligent Systems (ICIS), Kuala Lumpur, Malaysia, 1-3 Dec, 2005.

[3] **Monica Mehrotra** & S.I.Ahson, '*Self Organizing maps for Text Clustering*', in Proceedings of International Conference on Cognitive Systems (ICCS), New Delhi, 14-15 Dec, 2005. Organized by Centre for Research for Cognitive Systems, NIIT Ltd.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.93.86&rep=rep1&type=pdf>

[4] S K Pandey, M Alam, **M Mehrotra**, S I Ahson, '*A comparative study of IT Security Standards*', in Proceedings of International Conference on Information Processing organized by Visvesaraya College of Engineering, Bangalore University, India, Aug 10-12, 2007.

[5] **M Mehrotra** & S I Ahson, '*Text Preprocessing for Intelligent Information Retrieval*' in Proceedings of International Conference on Data Management (ICDM – 2008) organized by IMT, Ghaziabad, India, Feb 25-26, 2008

[6] N Jabbar & **M Mehrotra**, '*Application of Fuzzy Neural Network for Image Tumor Description*' in proceedings of CESSE 2008: International Conference on Computer, Electrical, and Systems Science, and Engineering, Venice, Italy Oct15-17, 2008..

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.193.1921&rep=rep1&type=pdf>

[7] Kalpana & **M Mehrotra**, '*Comparitive Analysis of Ontology Engineering Tools*', in proceedings of International Symposium on IT 2008 (ITSIM08), at Kuala Lumpur, Malaysia on 26th-29th Aug 2008. co-sponsored by **IEEE**. (ISBN 978-1-4244-2327-9) pp. 2582-2585.

<https://ieeexplore.ieee.org/abstract/document/4631914>

[8] Kalpana & **M Mehrotra**, '*Modelling uncertainty in Ontologies*', International conference on Web Intelligent Systems, Jan 8-10 ,2009 Chennai India, In Association with Computer Society of India and **IEEE** Madras Chapter.pp.98-103, (ISBN 978-81-8487-013-8).

[9] Muna M. T. Jawhar & **Monica Mehrotra**, '*Real Time Intrusion Detection System based on Neural Network*', International Conference On Data Management, IMT Ghaziabad, India (ICDM2010), hold at Institute of Management Technology in Ghaziabad, 11-12 March 11-12 , 2010. ISBN:023-032-979-9, pp.168-174.

[10] Mukta Narang & **Monica Mehrotra**, '*Software Security Measurement using Comparative Weight Calculation Method in CIAAAN*' in conference proceedings of International conference on Software engineering and applications (SEA 2011), Singapore, December 2011, pages 70 – 75, ISSN 2251-2217.

[11] Monika Singh & **Monica Mehrotra**, '*Implicit Behavior Addition for Improving Recommendations*', in conference proceedings of International Conference on Computing, Communication and Automation held at School of Computing Science and Engineering, Galgotias University in collaboration with IEEE on 15-16 May, 2015, pp. 103-107. ISBN 978-1-56581-231-4. Published in proceedings titled 'Computing, communication and automation'. Editors Abhishek Swaroop and Vishnu Sharma.(Scopus).

<https://doi.org/10.1109/CCAA.2015.7148350>

[12] Monika Singh & **Monica Mehrotra**, '*Bridging the gap between Users and Recommender Systems: A change in perspective to User Profiling*', presented at the International Symposium on Intelligent Systems Technologies and Applications (ISTA'15), August 10-13, 2015, Kochi, Kerala, India. Proceedings in book titled 'Advances in Intelligent Systems Technologies and Applications'. Editors Stefano Berreti, Sabu M Thampi and Soura Dasgupta published by Springer, pp. 379-386, vol.385. ISSN 2194-5257, ISBN 978-3-319-23257-7.(Scopus)

https://link.springer.com/chapter/10.1007/978-3-319-23258-4_33

[13] Sapna Varhney and **Monica Mehrotra**, ‘A differential evolution based approach to generate test data for data-flow coverage’, in proceedings of International conference on computing communication and automation (ICCCA2016) held at Galgotias University on 29-30th April, 2016 technically co-sponsored by IEEE. Available on IEEE explore in 2017. Editors Dr. Parma Nand Astya, Dr. Abhishek Swaroop, Dr. Vishnu Sharma and Mr. Manjeet Singh. Paper available on IEEE Xplore, pp.796-801.(Scopus)

<https://doi.org/10.1109/CCAA.2016.7813848>

[14] Seema Rani and **Monica Mehrotra**, ‘Hybrid influential centrality based label propagation algorithm for community detection’, in proceedings of International Conference on Computing Communication and Automation (ICCCA 2017) organized by School of Computing Science and Engineering, Galgotias University on 5-6 May, 2017. Technically co-sponsored by IEEE. School of Computing Science and Engineering, Galgotias University. IEEE. pp.11-16. doi: 10.1109/CCAA.2017.8229801. Editors Dr. Parma Nand Astya, Dr. Abhishek Swaroop, Dr. Vishnu Sharma, Dr. Manjeet Singh and Mr. Keshav Gupta.(Scopus , IEEE).

<https://doi.org/10.1109/CCAA.2017.8229801>

[15] Ajay Rastogi and **Monica Mehrotra**, ‘Impact of behavioral and textual features on opinion spam detection’, presented in International conference on Intelligent Computing and Control systems (ICICCS) June 14-15, 2018 organized by Vaigai College of Engineering, Madurai, India. Published by IEEE Xplore. ISBN 978-1-5386-2842-3, pp. 852-857.(Scopus, IEEE)

<https://doi.org/10.1109/ICCONS.2018.8662912>

[16] Seema Rani and **Monica Mehrotra**, ‘A hybrid Bat algorithm for community detection in social networks’, presented in 10th World Congress on Nature and Biologically inspired computing held by School of Information Technology & Engineering, VIT, Vellore, India on Dec 6-8, 2018. (NaBIC 2018). (Scopus, Springer).

https://link.springer.com/chapter/10.1007/978-3-030-16660-1_92

[17] Deepali Dhaka and **Monica Mehrotra**, ‘Cross-domain spam detection in Social media: A survey’, presented in International conference on emerging technologies in Computer Engineering, pp 98-112. (ICETCE 2019). Presented in second international conference at Jaipur Feb 1-2, 2019. (Scopus, Springer).

https://link.springer.com/chapter/10.1007/978-981-13-8300-7_9

[18] Chawla, S., & Monica Mehrotra, (2018, August). An Ensemble-Classifer Based Approach for Multiclass Emotion Classification of Short Text. In *2018 7th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions)(ICRITO)* (pp. 768-774). IEEE.

Link: <https://ieeexplore.ieee.org/abstract/document/8748757>

[19] Surbhi Kakar, Deepali Dhaka and Monica Mehrotra, ‘Value-Based Behavioral Analysis of Users using Twitter’ in International conference on inventive communication and computational technologies (ICICCT-2020), 28-29 May, 2020 scheduled at Namakkal, India. Proceedings by Springer.

https://link.springer.com/chapter/10.1007/978-981-15-7345-3_23

[20] Shivangi Chawla & Monica Mehrotra, ‘Deep learning for textual emotion mining’, in International conference on Futuristic Trends in Network and Communication Technologies (FTNCT-2019) is published online in the CCIS, Springer Series. pp. 289-303 (Scopus).

[21] Ajay Rastogi, Monica Mehrotra, and Syed Shafat Ali, “Effect of various factors in context of feature selection on opinion spam detection”, 11th IEEE International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE-2021), organized by Amity University. (Scopus Indexed) (Paper Accepted)

[22] Md. Shamsul Ansari & Monica Mehrotra, ‘Securing M2M communication in Smart Cities’, Paper presented in **IEEE** International Conference for Emerging Technology (INCET 2020) on 05 June-2020.

<https://ieeexplore.ieee.org/abstract/document/9154158> (IEEE Xplore Digital Library).

(B) National Conference/Workshop papers/articles:

[1] **Monica Mehrotra**, ‘*Information Technology as Facilitator – Enhancing Teaching Methodology*’ in proceedings of National Conference WITSA held in March, 2003 at Jamia Millia Islamia, New Delhi, India.

[2] **Monica Mehrotra** & S.I.Ahson, ‘*Models for Information retrieval*’ in proceedings of National Conference on Frontiers in Applied and Computational Mathematics (FACM-2005) held on 4-5th March, 2005 at Thapar Institute of Engineering & Technology, Patiala, India.

[3] Monica Mehrotra, ‘*Text Retrieval*’ in Souvenir of NSIF – 07 (Natural Science Information Festival) organized by Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi on Feb26 – 28, 2007.

[4] S. K. Pandey, **M. Mehrotra**, S. I. Ahson, ‘*Practical Implementation Level Shortcomings in SSE-CMM*’, Proceedings of the National Conference on IT- Present Practices and Challenges (NCIT 2007), N. Delhi, India, Aug 31- Sep 1, 2007 pp 301-306

[5] S I Ahson, **M Mehrotra**, S K Pandey, S Rehman, ‘ *Security Assessment framework for object-oriented software*’ in Proceedings of National Workshop on Software Security organized by Deptt. Of Computer Science and DIT, Ministry of Communications & IT held at Jamia Millia Islamia, New Delhi, Sept 13-14, 2007.

[6] M Narang & **M. Mehrotra**, '*Software Security Challenges*' in Souvenir of NSIF-08 (Natural Science Information Festival) organized by Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi, Mar 4-6, 2008.

[7] Ajay Rastogi & **M. Mehrotra**, '*Key factors for the success of e-commerce sites*' in Proceedings of National Conference on 'Emerging trends in Computer Science and Information Systems (NCETCSIS- 2015) held at Maharaja Agrasen College, Delhi University on 13-14 March, 2015. Conference was sponsored by UGC. ISBN 978-93-84224-27-1.

V. Books Published:

[1] '*Software Project Measurement: Tools and techniques*' published by Narosa Publishing House Pvt. Ltd. in April 2014. Authors: Monica Mehrotra & Mukta Narang. ISBN 978-81-8487-382-5. Book also printed by Alpha Science International Ltd., 2014, 182 pages.

[2] '*Principles and practices of Software Engineering*' published by Narosa publishing House Pvt. Ltd. In April 2016. Authors : Monica Mehrotra & Sapna Varshney. ISBN 978-1-78332-218-3. Book also printed by Alpha Science International Ltd., 2016, 220 pages.

VI. Technical Association:

Member- ACM SIGIR (Special Interest Group on Information Retrieval)

Member – IEEE. Membership No – 90465685. Member for past ten years.

VII. Teaching Interests:

Taught following courses in PGDCA, MCA, B Sc

- C Programming
- Computer Fundamentals
- Data Structures & Program Design
- Systems Analysis and Design

- Advanced Database Management Systems
- Software Engineering
- Software Testing and Quality Assurance
- Database Management Systems
- Object-oriented Programming
- Data Mining
- Pre-PhD course work

VIII. Participation in Technical Program Committees:

- Member, Technical Program Committee member of SoCProS 2011(Soft Computing for Problem Solving) held during Dec 16-18, 2011, at Roorkee, India.
- Member, technical Program committee BIC-TA 2012 (Bio-inspired Computing: Theories and Application) to be held at ABV-Indian Institute of information Technology and Management, Gwalior during Dec 14-16, 2012.
- Member, technical program committee WICT 2012 (World Congress on Information and Communication Technology) to be held in Trivandarum during Dec 2012
- Editor in 'Bioinfo Publications' for their Journal on Database and Knowledge Discovery. Website <http://www.bioinfopublication.org>.
- Chaired a Technical Session at ICDM08 at IMT, Ghaziabad.
- Member – BOS, Lingaya's Institute of Management & Technology, Faridabad.
- Involved as expert in committee setup by Department of Computer Science and Engineering at Lingayas University, Faridabad for Course curriculum development in April 2009.
- Chaired a session on Soft Computing at the 'National Conference on Knowledge Management' at Lingayas University, Faridabad during 8-9 March, 2010.
- Was judge for 'Inter-school Nanotechnology Challenge' held in Aug, 2010 at ASN Sr. Sec School, Mayur Vihar, New Delhi.
- Was invited by UPSC, Dholpur House, New Delhi for completion of confidential work in Nov. 2012, Nov. 2013, March 2014.
- Was invited as expert for PGT – Computer Science teacher Selection Committee for Kendriya Vidyalaya Sangathan, New Delhi on 4-5 July, 2014.

- Participated as a delegate at 7th DBT-BIF National Workshop on Translational Bioinformatics organized by department of Computer Science and DBT on Feb 15-16, 2017.
- Member BOS at Amity Institute of Technology, Sec-125, Noida from April 2017 –April-2018
- Chaired a session on ‘AI and Expert Systems’ at 7th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO) held on August 29-31, 2018 at Amity University, Noida, UP. Conference was technically co-sponsored by IEEE.
- Expert member in CSIR committee in Dec 2018 and Dec 2020 for scholar promotions from JRF to SRF and JRF selections.
- PhD expert examiner for Department of Computer Science, Banasthali Vidyapeetha.
- PhD expert examiner for Department of Computer Science, IP University, New Delhi.
- Member, Organizing Committee, 8th DBT-BIF National Workshop on Translational Bioinformatics held in March, 2018.
- Member, Organizing committee, 9th DBT-BIF National Workshop on Translational Bioinformatics on 6-7 March, 2019.
- Session chair in 9th DBT-BIF National workshop on Translational Bioinformatics on 7th March, 2019.
- Advisory Board Member, STQC, Ministry of Electronics & Information Technology, Govt of India.
- External Expert in DRC at Amity University, Sec-125, Noida.
- Subject Expert for Selection Committee in June 2019 in Private Engineering College (affiliated to IP University), Greater Noida.
- Chaired a session on ‘Application of image processing and computer networking in power electronics and automation’ in International conference on power electronics, control and automation (ICPECA – 2019) organized by department of Electrical engineering, Jamia Millia Islamia on 16-17 Nov, 2019.

IX. Professional Activities in Corporate life of the University:

(A) Current role and responsibilities:

- Member – Board of Studies, Department of Computer Science, JMI
- Member – Purchase Committee, DCS, JMI
- Member – Curriculum Committee, DCS, JMI
- Advisor – Subject Association, DCS, JMI
- Member – Department Research Committee, DCS, JMI
- Invited by USIT, GGS IP University for conducting Lab examination on 28th Nov, 2013, May, 2014.
- Attended a National workshop on ‘Intellectual property rights and patent technology’ on 18th March, 2015 organized by Centre for Innovation and Entrepreneurship, JMI. The workshop was conducted by TIFAC, Department of Science and Technology, Government of India.
- Attended a lecture by Bharat Ratna Prof. Rao on ‘Celebration of Science’ at 12 noon on 25th March, 2015 at M.A. Ansari auditorium, JMI.
- Attended a Refresher Course on ‘Graph Mining and Analysis’ from Dec 17-23, 2015 organized by Department of Computer Science under GIAN (Global Initiative of Academic Networks), Ministry of HRD, Government of India.
- Was Officiating Head, Department of Computer Science on various dates as per requirement.

(B) Previous role and responsibilities:

- Tabulator – Examinations for four consecutive years.
- Member – BOS, Department of Computer Science, JMI
- Member – Faculty Committee, Faculty of Natural Sc., JMI
- Asst. Controller of Examinations, DCS, JMI
- Advisor – Subject Association, DCS, JMI (August 2007 – present)
- Co-ordinator – Time-table and course allocation, DCS, JMI
- Member – Placement Committee, DCS, JMI
- Co-ordinator – Annual Progress Report and Jamia Newsletter, DCS, JMI
- Co-investigator – DIT funded project on ‘Development of a security assessment framework for object-oriented software’ worth 33.26 Lakhs from Dec 2006 to Sept 2008.
- Organized the event ‘Computer Awareness Camp’ during the Talimi Mela week from the Department of Computer Science in 2008.

- Convener – ‘National workshop on Software Security’ organized by Software Security Lab, DCS in Association with DIT, Ministry of Communications & IT, Govt. of India.
- Convener – ‘Validation Workshop’ organized by the Security Lab, DCS for the DIT funded Project.
- Compeer – Natural Science Info. Festival 2006 (NSIF06) and NSIF07.
- Co-ordinator Teknothon festival of department in 2014 and 2015.
- Co-ordinator Hop 2011 and 2012.

X. Awards received:

‘Excellent Researcher Award (female)’ was awarded on 3rd Oct, 2020 By 2nd International academic and research excellence awards(IARE – 2020) by GISR foundation. The ceremony was held in Goa and was available online also.

XI. Invited Lectures:

- 1) Keynote address on ‘Intelligent Information Retrieval’ in National Conference on ‘Data Mining and Warehousing 2012’ organized by Deptt. Of Computer Engg. Held at Lingayas University on 13th April 2012.
- 2) Delivered a lecture on ‘Computing Fundamentals’ in the 105th 4-week Orientation programme held at the Academic Staff College, Jamia Millia Islamia, New Delhi on 26th July, 2013.
- 3) Delivered a lecture on ‘Data Mining – trends and issues’ in the 105th 4-week Orientation programme held at the Academic Staff College, Jamia Millia Islamia, New Delhi on 26th July, 2013.
- 4) Keynote address on ‘Distributed databases : Storage, Retrieval and Archival issues’ given in National Seminar on Distributed Systems held at Gittaranjan International Business School, Rohini on 29th March, 2014.
- 5) Delivered a lecture on 19th May, 2014 on ‘Trends in Pervasive Computing’ at the 4th 3-week Refresher Course in Basic Sciences (ID) organised by the UGC Academic Staff College, Jamia Millia Islamia, New Delhi from 12th May, 2014 to 02nd June, 2014.
- 6) Delivered a lecture on ‘Effective Recommender Systems in the age of Big Data’ in National Conference on ‘Emerging trends in Computer Science and Information Systems (NCETCSIS-

2015) held at Maharaja Agrasen College, Delhi University on 14th March, 2015. Conference was sponsored by UGC.

7) Delivered an invited lecture on ‘Detection of opinion spam in e-commerce websites’ at International conference on ‘Mathematics for brain research held at Noida International University, Greater Noida on 1st Feb, 2016.

8) Delivered an invited talk on ‘Clustering techniques for Recommender Systems in the age of Big Data’ at PGDAV College, Delhi University on 12th Feb, 2016

XII. Foreign Visits:

- Presented a paper in Singapore in Dec 2011.
- Visited Stanford University, California, USA in June 2011 and June 2015.

XIII. References:

- Prof. SMK Quadri – Professor and Head, Department of Computer Science, Jamia Millia Islamia, New Delhi. Mobile No – 9873255489. Email – quadrismk@jmi.ac.in.
- Dr. Sushila Madan – Professor, Lady Sriram College (Delhi University), New Delhi. Mobile No – 9810162308. Email – sushila_lsr@yahoo.com

XIV. Other Interests:

- Discussions in Research Areas
- Traveling

(Dr. Monica Mehrotra)