

## Faculty Profile

Name : Sonika Malik  
Designation : Asst. Prof.  
Qualifications : Ph.D. Pursuing (NIT Kurukshetra),  
M. Tech, B. Tech  
Phone : +91-9818820319  
Email : Sonika.malik@msit.in  
Area of Interest/Specialization: Ontology Engineering, Semantic Web,  
Knowledge Representation  
Experience : 14 years



### Key Publications

1. Sonika Malik, Sarika Jain, “F-ONTOCOM: A Fuzzified Cost Estimation Approach for Ontology Engineering”, Journal of Web Engineering, **SCI-E Indexed, In Print.**
2. Sonika Malik, Sarika Jain, “A Bayesian Network Approach to Handle Uncertainty in Web Ontology”, IJRIS, Inderscience, **Scopus Indexed: In Print.**
3. Sonika Malik, Sarika Jain, “Text Classification made Intelligent using Ontologies”, International Journal of Information System Modeling and Design (IJISMD), IGI Global, **Under Revision, ESCI & Scopus Indexed.**
4. Malik, S., & Jain, S. (2021). Sup\_Ont: An Upper Ontology. International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), 16(3), 79-99, Scopus indexed. <http://doi.org/10.4018/IJWLTT.20210501>, **Scopus Indexed.**
5. Sonika Malik, Sarika Jain, “Handling Uncertainty in OWL using BN”, Test Engineering and Management”, pp. 12678-12689, May-June 2020, vol 83, ISSN: 0193-4120, **Scopus Indexed.**
6. Malik, S. (2019). Ontology Based Construction of Bayesian Network. International Journal of Research in Advent Technology, 7(12), 1-7.
7. Sonika Malik, Vaibhav Navani, Nagendra Singh Chauhan, Pahul Preet Singh,” Study on Existing Ontological Technologies”, vol5 (2016-17), pp. 18-23, ISSN: 2319-7897, SATYAM, MSIT.
8. Sonika Malik, Vaibhav Navani, Nagendra Singh Chauhan, Pahul Preet Singh,” Design and Implementation for Ontology”, vol5 (2016-17), pp. 18-23, ISSN: 2319-7897, SATYAM, MSIT.
9. Sonika Malik, Sanju Mishra, N.K. Jain, Sarika Jain “Devising a Super Ontology” Procedia Computer Science (Elsevier), vol 70, pp. 785-792, 2015, **Scopus Indexed.**
10. Mishra, S., Malik, S., Jain, N. K., & Jain, S. (2015). A realist framework for ontologies and the semantic Web. Procedia Computer Science, 70, 483-490, **Scopus Indexed.**

## **Papers presented in Conferences**

1. Sonika Malik, Sarika Jain, “Semantic Ontology-Based Approach to Enhance Text Classification”, CEUR Workshop Proceedings, vol 2786, pp. 85-98. International Semantic Intelligence Conference, Delhi, India. 25-27 Feb 2021, **Scopus Indexed**.
2. Sonika Malik, Sarika Jain “Knowledge Representation Formalisms: Description Logics”, 1st International Conference on Science in Hindi, 22 August, 2017, pp: 117-118, ISSN 1549-523-X
3. Sonika Malik, Sarika Jain, “Ontology Based Context Aware Model”, International Conference on Computational Intelligence in Data Science (ICCIDS 2017), 2-3 June 2017, pp: 1-6. IEEE, ISBN: 978- 1-5090-5595-1.
4. Sonika Malik, Nidhi Sharma, “Provisioning of Quality of Service in Manet’s by Performance Analysis and Comparison of AODV and SAODV using free attack simulation environment, 3rd IEEE International Conference on Information Management and Engineering (ICIME 2011), 21-22 May, 2011.

## **Book Chapter/Books published**

1. Sonika Malik, Sarika Jain (2020), “A Review on Methods to handle Uncertainty”, In: Smys, S., Iliyasa, A.M., Bestak, R., Shi, F. (Eds.), New Trends in Computational Vision and Bio Inspired Computing, Springer Nature Switzerland AG, Hardcover ISBN: 978-3-030-41861-8, eBook ISBN: 978-3-030- 41862-5

## **Awards and Recognitions**

1. Received an Appreciation letter for organizing an FDP on “Recent Advancements and challenges in IT” in 2021.
2. Received an Appreciation letter for organizing a Seminar on “Knowledge Representation with Ontology” in 2020.
3. Received an Appreciation letter for excellent services for Academic Growth in 2016.
4. Organize a Special Session “Exciting challenges for semantic Web Technologies and Applications (ECSWTA 2021)” in International Semantic Intelligence Conference (ISIC 2021).

## **Organized and Attended Events**

1. Organized an FDP on “Recent Advancements and challenges in IT” from 8<sup>th</sup> March, 2021 to 12<sup>th</sup> March, 2021.
2. Organized a Seminar on “Knowledge Representation with Ontology” on 22<sup>nd</sup> October, 2020 by Dr Archana Patel.
3. Attended International Workshop on “Semantic Techniques and Technologies for Data and Knowledge Representation” from 22<sup>nd</sup>, 2021 to 26<sup>th</sup> February, 2021 organized by SemTech.
4. Attended FDP on “Semantic Intelligence: The Way Forward with Artificial Intelligence (Part II)” by ATAL from 21<sup>st</sup> July, 2021 to 25<sup>th</sup> July, 2021.

5. Attended FDP on “Semantic Intelligence: The Way Forward with Artificial Intelligence (Part I) Elementary” by ATAL from 1<sup>st</sup> July, 2021 to 7<sup>th</sup> July, 2021.
6. Attended FDP on “Use of ICT in Engineering Education (MSIT)” sponsored by MHRD from 15<sup>th</sup> March, 2021 to 20<sup>th</sup> March, 2021.
7. Attended FDP on “Artificial Intelligence and Its Applications” by NITTTR, Chandigarh 27<sup>th</sup> July, 2020 to 31<sup>st</sup> July 2020.
8. Attended FDP on “Semantic Intelligence: Applications and Perspectives, NIT Kurukshetra” from 26<sup>th</sup> Sep., 2020 to 30<sup>th</sup> Sep., 2020.
9. Attended FDP on “Latest Wireless and Computing Technologies” by NITTTR, Chandigarh from 14<sup>th</sup> April, 2020 18<sup>th</sup> April, 2020.
10. Attended FDP on “Neural Network and CNN” by NITTTR, from 9<sup>th</sup> April, 2020 to 14<sup>th</sup> April, 2020.
11. Attended FDP on “Machine Learning using Python” MSIT, from 2<sup>nd</sup> March, 2020 to 6<sup>th</sup> March, 2020.
12. Attended FDP on “Faculty Development: Planning and Management for Institutional Excellence” NITTTR, Chandigarh from 18<sup>th</sup> Nov., 2019 to 22<sup>nd</sup> Nov., 2019.
13. Attended FDP on “Contemporary Issues and Challenges in Management, Education and Information Technology” NITTTR, Chandigarh from 5<sup>th</sup> Feb, 2019 to 9<sup>th</sup> Feb, 2019.
14. Attended FDP on “Open Source Technologies” NITTTR, Chandigarh from 3<sup>rd</sup> Dec, 2018 to 7<sup>th</sup> Dec, 2018.
15. Attended FDP on “Data Science using R” NITTTR, Chandigarh from 26<sup>th</sup> Nov, 2018 to 30<sup>th</sup> Nov, 2018.
16. Attended FDP on “Wireless Networks through ICT NITTTR”, Chandigarh from 22<sup>nd</sup> May, 2017 to 26<sup>th</sup> May, 2017
17. Attended FDP on “Research Methodology & Data Analytics” MSI from 16<sup>th</sup> Dec, 2016 to 23<sup>rd</sup> Dec, 2016
18. Attended FDP on “MATLAB Programming” NITTTR, Chandigarh from 1<sup>st</sup> Feb, 2016 to 5<sup>th</sup> Feb, 2016
19. Attended FDP on “7 QC Tools” MSIT from 10<sup>th</sup> Nov, 2014 to 10<sup>th</sup> Nov, 2014
20. Attended FDP on “Android Applications development” MSIT from 11<sup>th</sup> Sep, 2012 to 12<sup>th</sup> Sep, 2012.
21. Attended FDP on “Intelligent Tools for Various Engineering Applications” MSIT from 12<sup>th</sup> April, 2012 to 13<sup>th</sup> April, 2012
22. Attended FDP on “Human Values & Ethics” MSI from 4<sup>th</sup> Feb, 2012 to 4<sup>th</sup> Feb, 2012
23. Attended FDP on “Data Mining Workshop using SPSS Clementine” AIT, Delhi from 27<sup>th</sup> Feb, 2009 to 27<sup>th</sup> Feb, 2009.
24. Attended Seminar on “Advances in Speech Technology A way towards Intelligent Human Computer Interaction” MSIT from 27<sup>th</sup> Nov., 2017 to 28<sup>th</sup> Nov., 2017.
25. Attended Conference on “Paradigm Shift from Developing to Developed India through Digitization” MSI from 28<sup>th</sup> July, 2017 to 29<sup>th</sup> July, 2017.
26. Attended workshop on “Implementation of Sensor Networks using NS-2” MSIT from 25<sup>th</sup> April, 2014 to 26<sup>th</sup> April, 2014.

27. Attended workshop on “Research Methods & Data Analysis Using SPSS” MSIT 12<sup>th</sup> April, 2012 to 13<sup>th</sup> April, 2012.
28. Attended Seminar on “MATLAB and Simulink for Engineering Education” from 18<sup>th</sup> August, 2011 to 18<sup>th</sup> August, 2011,
29. Attended Seminar on “Information Super-Highway- A Road to Excellence” DIAS, Rohini on 15<sup>th</sup> March, 2008.

### **Organized and Attended Events**

1. Served as Project Coordinator.
2. Served as Summer Training In-charge.
3. Worked as a Team member of Unnat Bharat Abhiyaan.
4. Worked as a Team Member of AICTE (Ek Bharat Shresth Bharat).
5. Worked as Team Member in GGSIPU Schemes Committee.
6. Worked as a Core Team member in Avensis.
7. Worked as a Core Team Member in Genesis 2020.
8. Currently Working as an ISO In-charge.
9. Currently Working as a Placement Faculty Coordinator.
10. Currently Working as a Team Member in MSIT Alumni Committee

### **Certification:**

I certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience.

**Sonika Malik, Dept. of IT**

Name of the Faculty