

Curriculum Vitae

Dr. Sonia Rathee
Associate Professor
Computer Science and Engineering Department
Maharaja Surajmal Institute of Technology, New Delhi

1. Personal Details:

Date of Birth	02/02/1984
Father's Name	Dr. Ajit Singh Rathee
Email ID.	Soniasinghpanghal@gmail.com
Nationality	Indian

2. Educational Qualification

S No.	Degree/Diploma/Certificate or other specialized education obtained	College and/ or University	Year	Division
<u>1</u>	Ph.D. (CSE)	U.I.E.T, M.D.U, Rohtak, Haryana	2019	-----
<u>2</u>	M.Tech (CSE)	K.U, Kurukshetra, Haryana	2007	First
3	B.E(CSE)	M.D.U, Rohtak, Haryana	2005	First
4	12 th	CBSE	2001	First
5	10 th	CBSE	1999	First

3. Employment Record

S No.	From [Month &Year]	To [Month &Year]	Employer Name	Positions Held	No of Years
1	1/09/2007	Till date	Maharaja Surajmal Institute of Technology, New Delhi	Assistant Professor (1/9/2007 to 31/1/2024) Associate Professor(1/2/2024 to till date)	17+

4. Patent

S No.	Title of Patent/Copyright	Applicants	Patent /copyright number and Year
1	Cartoonify image detection using Machine Learning	Sonia Rathee	2021101766, 6 April 2021

5. Research Papers in National and International Journals

S No.	Title of Paper (Vol and Page No.)	Name of Journal	National/ International	SCI/SCIE/SSCI/ ESCI	Scopus/ Journals of UGC listed	Year of Publication
1.	Diabetes prediction using feature engineering and machine learning algorithms with security	Journal of Statistics & Management Systems	International	ESCI		2024
2.	Epilepsy Detection using Novel Bayesian Optimized Stacked Deep Learning Layers	SN Computer Science	International		Scopus	2024
3.	An Intelligent Lane and Obstacle Detection using YOLO algorithm	International Journal of Intelligent System and Application in Engineering	International		Scopus	2023
4.	Blockchain Technology-based Messenger	MSIT Journal of research-SATYAM Special Issue-Technovation	National			2023
5.	Emotion Recognition Using Facial Expressions	International Journal of Information Retrieval Research	International	ESCI		July 2021
6.	Spatiotemporal multigranularity for evaluating the techniques in different domains	IJMET	International		Scopus	2018
7.	Development of effective visual	IJCIET	International		Scopus	2018

	interface for viewing and manipulating the geometrical and temporal attributes of spatio-temporal database in air aviation using the Big data					
8.	Interactive selection of multivariate features in spatio-temporal data and its changes depends on the selection of objects, event, state and it's 3c's	International journal of computer science and engineering	International		UGC Listed journal	2017
9.	Using quality database convert data into quality data and automate the control points using SURF algorithm in spatio-temporal data	International journal of computer science and engineering	International		UGC listed Journal	2017
10.	Image Classification using Artificial Neural Networks	MSIT Journal of Research -Satyam	National			2017
11.	Agent based traffic simulator for autonomous vehicles	International Journal of Scientific Research in Computer Science and Engineering Vol.5, Issue.2, pp.42-45	International		UGC listed Journal	2017
12.	Survey on spatio-temporal data models with relevant features	International journal of scientific and research publication	International		Google Scholar	2013
13.	Cardio Malady Prognostication	MSIT Journal of Research -Satyam	National			2018

6. Research Papers presented in Conferences

S No.	Title of Paper	Name of Conferences	National/ International	Year
1	Energy Efficient Mobile Application for	<i>International Conference on Cognitive, Green and Ubiquitous Computing (IC-</i>	International	2024

	Solar Energy using Machine Learning	CGU), Bhubaneswar, India(IEEE Conference)		
2	Epilepsy Detection using Novel Bayesian Optimized Stacked Deep Learning Layers	ICAIA-2024	International	2024
3	Web Traffic time series Forecasting	ICIDSSD	International	2024
4	Enhancing Gaming Experience with Real time Posture Detection	ICIDSSD	International	2024
5	Automatic Grading System for subjective exams using OCR and Semantic Similarity	ICIDSSD	International	2024
6.	Automatic Text Summarization Using Recent Bert Architectures	International Conference on Interdisciplinary Research For Sustainable Development	International	2023
7.	A Study on Air Quality Index Analysis and its Effects on Health	ICRIC-23	International	2023
8.	Natural Language based naïve bayes classifier model for sentence classification	ICICC	International	2022
9.	Spatio-temporal distribution characteristic of covid 19 vaccine using time series forecasting	CONFLUENCE -22	International	2022
10.	A novel approach of object detection using deep learning for animal safety	CONFLUENCE -22	International	2022
11.	Hindi optical character recognition using self-attention-based model	ICRESMA	International	2022
12.	Prediction of crop and fertilizers recommendation of crop health using Machine learning	ICMEMS	International	2022
13.	A platform to aggregate latest algorithmic innovations in the field of Quantum computing	International conference of undergraduate students ICUS 2021	International	2021

14.	Spatial and Temporal Variability of Soil and Climate of Haryana using Geographic Information System	International Conference on Mathematical Techniques in Engineering Applications	International	2021
15.	Colligate the different data mining techniques for prediction and diagnosis of tuberculosis disease	International conference on ICT for Digital Smart and sustainable development	International	2020
16.	Revamping cloud computing environment using enhanced particle swarm optimization algorithm	International conference on information, communication, and computing technology in collaboration with springer	International	2017
17.	Spatio-temporal data models with their different approaches and their features	Advanced computing and communication technologies	International	2015
18.	Survey on security threats and issues in wireless sensor networks	Current scenario and emerging trends in information technology	National	2013
19.	Wireless sensor networks: issues, challenges and application	Advances and research in electrical system technology	National	2011
20.	Geographical information system	Multidisciplinary approach in frontier areas of environmental science and engineering	National	2011

7. Books and Journals Published/Edited

S No.	Title of Book/Journal	Publisher	National/ International	Year of Publication
1	Spatio-Temporal Database	Research India Publication	International	2019

8. Book Chapters in National and International Books

S No.	Title of Chapter (Page No.)	Name of Book	National/ International	Year of Publication
1	Eye gaze mouse empowers people with disabilities	Disruptive Technologies for Society 5.0	International, Taylor and Francis	2021
2	Generative adversarial networks: Comprehensive review	Data Wrangling and its principles	International, Wiley	2023
3	Dimension Reduction Techniques in Distribution Semantics: An Application Specific Review	Data Wrangling and its principles	International, Wiley	2023

9. Trainings and FDPs

S No.	Name of Training	Name of Training Institution, City	Type of Training and FDPs	Period	
				From	To
1	Recent Advancement in machine learning and Artificial Intelligence	MSIT	FDP	6-2-23	10-2-23
2	Modern Web Design with UI	Brain Mentors Pvt Ltd.	Industrial Training	3-11-23	8-11-23
3	Python Programming	Pantech Pvt.Ltd.	Industrial Training	25/10/23	14/11/23
4	Deep Learning	Brain Mentors Pvt Ltd.	Industrial Training	21-11-22	3-12-22
5	INTERNET OF THINGS(IOT)- A PRACTICAL APPROACH	ATAL Academy	FDP	6-12-22	10-12-22
6	Data Science and Analytics	Pantech e-learning Pvt.Ltd.,Chennai	FDP	20-1-2022	18-2-2022
4	Embedded System and Robotics	e-Yantra by IIT Bombay	FDP	Jan-July 2022	
7	Internet of Things	MSIT	FDP	4-1-21	9-1-21
8	Recent Advancement and challenges in IT	MSIT	FDP	8-3-21	12-3-21
9	Use of ICT in engineering education	MSIT	FDP	7-4-21	13-4-21
10	Internet of Things	ATAL Academy	FDP	6-12-21	10-12-21
11	Data Science	Brain Mentors Pvt Ltd.	Industrial Training	15-11-21	26-11-21
12	Data Analysis using python	M.S.I.T, Delhi	FDP	12-10-2020	16-10-2020
13	Machine learning using Python	M.S.I.T, Delhi	FDP	02-03-2020	06-03-2020
14	Contemporary issues and challenges in management	M.S.I.T, Delhi	FDP	05-02-2019	09-02-2019
15	Geo Spatial Analysis in urban Planning	NPTEL	FDP	Jan-feb	2018
16	Wireless Networks through ICT	NITTTR, Chandigarh	FDP	22-05-2017	26-05-2017
17	Emerging trends in information technology	M.S.I.T, Delhi	FDP	29-02-2016	04-03-2016
18	Capacity building to enhance the research output	BVICAM, Delhi	FDP	21-07-2014	25-07-2014
19	High performance	M.S.I.T, Delhi	FDP	16-03-	16-03-2013

	computing using oracle 12 c			2013	
20	Loophole and ethical hacking	M.S.I.T, Delhi	FDP	28-09-2012	29-09-2012
21	Web hacking and security	NITTTR, Chandigarh	FDP	28-05-2012	01-06-2012
22	Recent Trends in mobile and web technology	M.S.I.T, Delhi	FDP	10-03-2012	10-03-2012
23	Embedded system using ARM and embedded C	M.S.I.T, Delhi	FDP	02-02-2012	04-02-2012
24	Fuzzy logic and neural network	M.S.I.T, Delhi	FDP	04-11-2011	05-11-2011
25	Advanced web technologies and business intelligence	C-DAC Hyderabad	Training	01-12-2008	12-12-2008

10. Conferences/ Workshops/ Seminars/Webinars Attended

S No.	Name of Conferences/ Workshops/ Seminars	Name of Institution, City	Type of Conferences/ Workshops/ Seminars	Period	
				From	To
1	E-yantra Symposium	IIT,Bombay	Symposium	5-4-2023	6-4-2023
2	Advances in speech technology a way towards intelligent computer interaction	MSIT	Seminar	27-11-2017	28-11-2017
3	Implementation of sensor networks using NS2	M.S.I.T, Delhi	Workshop	25-04-2014	26-04-2014
4	Geo cloud computing and cryptology	MRIU, Faridabad	Workshop	21-09-2012	22-09-2012
5	Android technology and mobile application	M.S.I.T, Delhi	Workshop	11-09-2012	12-09-2012
6	Data Mining- Research, Issues, Recent trends and PASW Modeler 12.0 based implementation	GGSIPI	Workshop	04-03-2011	05-03-2011
7	Introduction to java with Net Beans	NIIT Delhi	Seminar	18-07-2008	18-07-2008
8	Learn how to find a software faults before our customers find them	GGSIPI	Workshop	15-12-2007	16-12-2007
9	Emerging trends in technical education	M.S.I.T, Delhi	Seminar	08-05-2010	

11. Achievements

1. President Award in Bharat Scouts and Guide.

- 2. Received Young Faculty Research Award by CEGR.**
- 3. Received Letter of Appreciation regarding result from President SMES.**
- 4. e-Yantra lab set up in college and successfully completing the 50 days course on Embedded System and Robotics, conducted as a part of MOOC through the e-Yantra Resource development Centre, IIT Bombay.**
- 5. Session chair at Jamia Hamdard on 27th Feb 2020. 2nd international conference on ICT for Digital, smart, and sustainable development ICIDSSD 27-28 Feb. 2020. ISBN- 978-1-63190-292-5.**
- 6. Technical program committee Member of National and International conferences organised in college and outside college.**
- 7. Reviewer and Program committee member of many International Conferences and Journals.**

Certification

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

Signature:

[Name and Signature]

Name: Dr Sonia Rathee