Name *Dr. NATTHAN SINGH*

Father's Name Shri Bihari Singh

Department Computer Science & Engineering

Designation Associate Professor

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Institute of Engineering& Technology

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Educational Qualifications:

DEGREE/EXAM	SUBJECT	BOARD/UNIVERSITY	YEAR/DIV
PASSED			ISION
Ph.D.	Computer Science &	Indian Institute of Technology,	2022
	Engineering	Roorkee	
M.Tech.	Computer Science &	Uttar Pradesh Technical University,	2014, First
	Engineering	Lucknow	
B.E.	Computer Engineering	Madan Mohan Malaviya	1997, First
		Engineering College, Gorakhpur	
Intermediate	PCM group	U P board, Allahabad	1992, First
High School	Science group	U P board, Allahabad	1990, First

Experience:

Designation	Institute/University	From	To
Associate Professor	Institute of Engineering & Technology	July,2018	Till date
	Lucknow		
Assistant Professor	Institute of Engineering & Technology	Jan 2006	July,2018
	Lucknow		
Lecturer	Institute of Engineering & Technology	July 2003	Dec 2005
	Lucknow		
Lecturer	Institute of Engineering & Technology,	Oct 2002	July 2003
	MJP Rohilkhand University, Bareilly		
Guest Faculty	Madan Mohan Malaviya Engineering	July 1999	Oct 2002
	College, Gorakhpur		

Administrative assignment at IET Lucknow:

- Deputy Dean Student Welfare
- ➤ Assistant centre superintendent for End Semester Examination
- ➤ Member, BOS Computer Science & Engineering department
- ➤ Coordinator Time Table Computer Science & Engineering department
- ➤ Hostel warden, Raman A, IET Lucknow
- Assistant Deputy Chairman Cultural and sports activities (ISSACC)
- ➤ Vehicle in charge, IET Lucknow

- ➤ Faculty in charge/Faculty advisor for B.Tech. students at Computer Science & Engineering department.
- Member of various committee(s) for student activities, employees' activities etc.

Supervision:

➤ M.Tech.: 03(awarded), 01(ongoing)

Publications:

Journals Articles/Chapters

- 1. Jauhar, S.K., **Singh, N**., Rajeev, A. and Pant, M. "Measuring paper industry's ecological performance in an imprecise and vague scenario: a fuzzy DEA-based analytical framework", *Benchmarking: An International Journal*, 2022, Vol. 29 No. 8, pp. 2471-2494. https://doi.org/10.1108/BIJ-06-2021-0319.
- 2. **Natthan Singh**, Millie Pant "Efficiency assessment of Indian paper mills through fuzzy DEA," Journal Materials and Manufacturing Processes , 2020, DOI : https://doi.org/10.1080/10426914.2019.1662034.(Quartile Q1)
- 3. **Natthan Singh**, Millie Pant "Performance of Elementary Schools by Data Envelopment Analysis and Differential Evolution," Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, Springer, Singapore, 2020, DOI: https://doi.org/10.1007/978-981-15-0751-9_40.
- 4. **Singh, N**., Pant, M., Goel, A "ANN embedded data envelopment analysis approach for measuring the efficiency of state boards in India," International Journal of System Assurance Engineering and Management, Springer, 2018, DOI: https://doi.org/10.1007/s13198-018-0743-8.(Quartile Q3)
- 5. Johari, N., **Singh, N**. "Bone Fracture Detection Using Edge Detection Technique," Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, Springer, Singapore, 2018, DOI: https://doi.org/10.1007/978-981-10-5699-4-2
- 6. **Singh, N**., Goyal, S. "Determination and Segmentation of Brain Tumor Using Threshold Segmentation with Morphological Operations," Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, Springer, Singapore, 2018, DOI: https://doi.org/10.1007/978-981-10-5699-4_68
- 7. Nancy Johari, Shivani Goyal, **Natthan Singh**, Anita Pal, "Bone Fracture Detection Algorithms Based on Image Processing-A Survey" International Journal of Engineering and Management Research (IJEMR), Volume 5, Issue 5, pp 61-64, ISSN:2394-6962, 2015.
- 8. Shivani Goyal, Nancy Johari, **Natthan Singh**, Anita Pal, "Survey on Different Brain Tumor Detection Methods or Algorithms" International Journal of Engineering and Management Research (IJEMR), Volume 5, Issue 5, pp 94-99, ISSN:2394-6962, 2015.
- 9. Dinesh Kr, Tiwari, **Natthan Singh**, "Web Service Security", International Journal of Scientific & Engineering Research, Volume 6, Issue 9, pp 161-164, ISSN:2229-5518, 2015.

Refereed Conference Proceedings

- 10. Singh, Shreya and Avasthi, Deepali and **Singh, Natthan** and Singh, Abhishek, "Deep learning techniques for leukemia classification: A survey" (August 27, 2024). Available at SSRN: https://ssrn.com/abstract=4938088 or http://dx.doi.org/10.2139/ssrn.4938088
- 11. S. Singh, D. Avasthi, **N. Singh**, A. Singh and S. Prakash, "Leveraging Pre-Trained CNNs and Ensemble Methods for Improved Diagnosis of Acute Lymphoblastic Leukemia," 2024 International Conference on Decision Aid Sciences and Applications (DASA), Manama, Bahrain, 2024, pp. 1-6, doi: 10.1109/DASA63652.2024.10836445.
- 12. **Singh, Natthan**, Jauhar, Sunil, Pant, Millie, Kumar, Sushil A "Fuzzy DEA approach for efficiency analysis: A case study of paper mills in India," KomPlash Tech 2019 XXVI Conference on Computer Methods in Materials Technology. Zakopane, Poland, 2019.
- 13. **Singh, N**., Pant, M. "Evaluating the efficiency of higher secondary education state boards in India: a DEA-ANN approach," Intelligent Systems Design and Applications. ISDA 2017. Advances in Intelligent Systems and Computing, Springer, Cham, 2018, DOI: https://doi.org/10.1007/978-3-319-76348-4_90.
- 14. **N.Singh**, M. Chandra, D. Yadav, "Formal Specifications of Asynchronous checkpointing using Event-B", 2015 International Conference on Advances in Computer Engineering and Applications, In Proc. IEEE Digital Library, 19-20 March 2015, DOI: 10.1109/ICACEA.2015.7164773.

Reviewer/Memberships

- ➤ Member, Computer Society of India(CSI)
- Reviewer, International Journal of Journal of Experimental & Theoretical Artificial Intelligence, Taylor and Francis.
- Reviewer, International Journal of Journal of Computational Science, Elsevier.
- Reviewer, International Journal of Future Generation Computer Systems, Elsevier.
- ➤ Reviewer, International Conference Soft Computing: Theories and Applications 2016(Amity University, Jaipur) and 2018(Dr. B.R. Ambedkar National Institute of Technology, Jalandhar.
- ➤ Organizing member, International Conference Soft Computing: Theories and Applications 2016.
- ➤ Reviewer adapted Indian edition, Discrete Mathematics and Its Applications Seventh Edition by Kenneth H. Rosen, TMH, India.
- ➤ Member Technical Program Committee, 2ND Doctoral Symposium On Computational Intelligence (DoSCI 2021) held at IET Lucknow
- ➤ Reviewer, International Journal of System Assurance Engineering and Management, Springer.
- > Reviewer, Soft Computing, Springer.
- ➤ Reviewer, Environmental and Sustainability Indicators, Elsevier

Workshops/Conference/seminar/short term courses organized:

- ➤ Editorial Chair, 6th Doctoral Symposium On Computational Intelligence (DoSCI 2025) held at Campus of Open Learning, University of Delhi and IET Lucknow
- ➤ Convenor, 6th Doctoral Symposium On Computational Intelligence (DoSCI 2025) held at Campus of Open Learning, University of Delhi and IET Lucknow
- Organizing Chair, 4th Doctoral Symposium On Computational Intelligence (DoSCI 2023) held at IET Lucknow
- ➤ Session Chair, 12th International Conference on Soft Computing for Problem Solving (SocProS 2023) held at Indian Institute of Technology Roorkee, Roorkee,
- ➤ Session Chair, IInd International Conference on Emerging Trends in IoT and Computing Technologies (ICEICT 2023) held at Goel Institute of Technology & Management (GITM) Lucknow.
- ➤ Convener, AICTE-ATAL sponsored faculty development programme on "Internet of Things" 29th October 2nd November 2020, Organized by CSE department of IET Lucknow.
- ➤ Organising member one month short term training program on UI Designing and Programming, November 6th December 4th 2019, Organized by CSE department of IET Lucknow.
- ➤ Organised a faculty development workshop on "Nano Particles and its applications" on April 29,2015 under the aegis of World Bank TEQIP-II at IET, Lucknow.

Orientation/Refresher Courses Attended During the session (Since January, 2014)

SNo.	Name of the Course/Summer School	Place	Duration	Sponsoring Agency
1	Short term course on "Cyber Crime & Forensic Tools Through ICT"	Lucknow	January 27 – 31, 2014	NITTTR Chandigarh
2	AICTE sponsored QIP short term course on "Recent Advances in Computational Methods with Applications"	IIT Roorkee	June 30 th – July 4 th 2014	AICTE QIP centre IIT Roorkee
3	Indo Czech School on Discrete Mathematics	IIT- Kanpur	February 5-6, 2015	TEQIP(IIT- Kanpur)
4	Training session on Spoken Tutorial Project (Under National Mission on Education through ICT)	Lucknow	February 23, 2015	IIT Bombay
5	Energy Efficiency workshop on oil conservation	Lucknow	March 18, 2015	PCRA
6	Workshop on "Advances in Electrical Engineering-2015"	Lucknow	April 25, 2015	TEQIP(IET Lucknow)
7	Short term course on "ASP.NET"	Lucknow	May 23 – 27, 2016	NITTTR Chandigarh
8	A Faculty development programme on "Networking Simulation & Related Technologies using NetSIM Software"	ICT	October 03 – 05, 2016	DellSoft Technologies

9	Short term course on "Recent Trends in	IIT	December 14	Deptt of CSE
	Network Security"	Roorkee	- 18, 2016	IIT Roorkee
10	Short term course on "Introduction to	IIT	December 4 –	Deptt of CSE
	cryptology"	Roorkee	8, 2017	and Mathematics
		110011100	0, 201.	IIT Roorkee
11	AICTE sponsored QIP short term	IIT	June 10 – 14,	AICTE QIP
	course on "Computational	Roorkee	2019	centre IIT
	Mathematics for Scientists and			Roorkee
	Engineers"			
12	A Faculty development programme on	Lucknow	October 19 –	TEQIP III (IET
	"Advances in Renewable and		23, 2019	Lucknow
	Bioenergy"			
13	NPTEL-AICTE Faculty development	Online	August-	Ministry Of
	programme on "Cloud Computing"		October,	HRD, Govt. of
			2019	India
14	AKTU-AICTE Faculty development	Online	July 6-10,	AKTU-AICTE
	programme on "Mathematical	(IET	2020	
	Modeling & its Application in	Lucknow)		
	Engineering"			
15	ATAL Academy Faculty development	Online	August 29 th –	AICTE
	programme on "Artificial Intelligence"	(AKTU	September	
		Lucknow)	2 nd 2020	
16	AICTE sponsored Faculty	Online	November	AICTE
	development programme on "Cyber	(GBPant	23 rd –	
	Crime & Security"	University,	December 5 th	
		PantNagar)	2020	
17	Short term course on "Sustainable	Online	February 6 –	TEQIP III (IET
	Trends in Energy & Environment"	(IET	10, 2021	Lucknow
		Lucknow)		

Conferences attended

- 1. International Conference Advances in Computer Engineering and Applications (ICACEA.2015), March 19 20, 2015 at IMS Engineering College, Ghaziabad.
- 2. International Conference Soft Computing for Problem Solving (SocPros-2015), December 18-20, 2015, at IIT Roorkee (Saharanpur Campus).
- 3. International Conference Soft Computing: Theories and Applications (SoCTA-2016), December 28-30, 2016, at Amity University Rajasthan, Jaipur.
- 4. 7th World Congress on Information and Communication Technologies (WICT 2017), December 14-16, 2017, at South Asian University, New Delhi.
- 5. International Conference Soft Computing: Theories and Applications (SoCTA-2018), December 21-23, 2018, at Dr. B.R. Ambedkar national institute of technology Jalandhar.
- 6. International Conference Computer Methods in Material science (KomPlasTech 2019), January 13-16, 2019 at Zakopane, Poland,
- 7. International Conference Defence and Space technologies (ICDST 2019), August 23-25, 2019, at Institute of Engineering and technology, Lucknow.
- 8. National conference Northern Regional Convention (NRC-19), December 14, 2019, Computer Society of India Lucknow chapter, Lucknow.

- 9. International Conference Contemporary Computing and applications (IC3A 2020), February 5-7, 2020, at Dr APJ Abdul Kalam Technical University, Lucknow.
- 10. International virtual conference Future Trends of Research and Innovation in Computer science & Information Technology, July 11, 2020, of India Lucknow chapter, Lucknow.
- 11. 2ND Doctoral Symposium on Computational Intelligence (DoSCI 2021), March 6, 2021 online held at IET Lucknow
- 12. 12th International Conference on Soft Computing for Problem Solving (SocProS 2023) held at Indian Institute of Technology Roorkee, Roorkee.
- 13. 4th Doctoral Symposium on Computational Intelligence (DoSCI 2023), March 4, 2023 online held at IET Lucknow

Grants Received:

Received travel grant for attending and presenting the research paper at "XXVI Conference on Computer Methods on Materials Technology, KomPlasTech 2019, Poland (13 January, 2019 to 16 January, 2019)" held at "Zakopane, Poland" via FILE NO. ITS/2018/005565, science & engineering research board (SERB) (a statutory body of the Department of Science & Technology, Government of India)

(Natthan Singh)