

Name **NATTHAN SINGH**
 Father's Name Shri Bihari Singh
 Department Computer Science & Engineering
 Current Designation & Grade Pay Assistant Professor (Selection Grade), AGP: 8000
 Date of Joining 10-07-2003
 Department of Computer Science & Engineering
 Institute of Engineering & Technology
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Educational Qualifications:

| DEGREE/EXAM PASSED | SUBJECT | BOARD/UNIVERSITY | YEAR/DIVISION |
|--------------------|--------------------------------|---|---------------|
| Ph.D. | Computer Science & Engineering | Indian Institute of Technology, Roorkee | 2022 |
| M. Tech. | Computer Science & Engineering | Uttar Pradesh Technical University, Lucknow | 2014, First |
| B.E. | Computer Engineering | Madan Mohan Malaviya Engineering College, Gorakhpur | 1997, First |
| 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 |
|---------------------|--|-----------|-----------|
| Assistant Professor | Institute of Engineering & Technology Lucknow | Jan 2006 | Cont.. |
| Lecturer | Institute of Engineering & Technology Lucknow | July 2003 | Dec 2005 |
| Lecturer | Institute of Engineering & Technology, MJP Rohilkhand University, Bareilly | Oct 2002 | July 2003 |
| Guest Faculty | Madan Mohan Malaviya Engineering College, Gorakhpur | July 1999 | Oct 2002 |

Administrative assignment at IET Lucknow:

- Deputy Dean Student Welfare
- Assistant centre superintendent for end semester examination
- In charge time table at department
- Hostel warden
- Assistant Deputy Chairman Cultural and sports activities (ISSACC)
- Vehicle in charge
- Faculty in charge for B.Tech. Students at department.
- Member of various committee(s) for student activities, employees activities etc.

Supervision:

- M.Tech.: 02(awarded)

Publications:

Journals Articles/Chapters

1. Jauhar, S.K., **Singh, N.**, Rajeev, A. and Pant, M. (2022), "Measuring paper industry's ecological performance in an imprecise and vague scenario: a fuzzy DEA-based analytical framework", *Benchmarking: An International Journal*, 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, 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.
11. 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.
12. 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.

Workshops/seminar/short term courses organized:

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

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|----|---|----------------------|-----------------------|-------------------------|
| 17 | Short term course on “Sustainable Trends in Energy & Environment” | Online (IET Lucknow) | February 6 – 10, 2021 | TEQIP III (IET 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. 3rd Doctoral Symposium on Computational Intelligence (DoSCI 2022), March 5, 2022 online held at IET Lucknow.
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)