

Dr. Tarun Kumar Sharma

PhD - IIT Roorkee; MCA; M.Tech, MBA

Professor – CSE, School of Engineering & Technology and Dean Academics, Shobhit University, Gangoh

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<https://www.linkedin.com/in/tarun-k-sharma-phd-76983819/>

<https://scholar.google.co.in/citations?user=AAhFXjQAAAAJ&hl=en>

Scopus 56689267100 (<https://www.scopus.com/authid/detail.uri?authorId=56689267100>)

https://www.researchgate.net/profile/Dr_Tarun_Sharma

Web of Science ResearcherID: <https://publons.com/researcher/2405195/dr-tarun-kumar-sharma>

Personal URL: <https://tanusharma0.wixsite.com/tarunksharma>

Vidwan ID: 213330



EDUCATION



Ph.D in Computational Intelligence

Indian Institute of Technology (IIT) Roorkee

July' 09 – September' 13



Master in Computer Applications

Shri Guru Ram Rai Inst. of Tech. & Science

July' 1998 – June' 2001



Master in Business Administration in Mktg. /IT

Vardhaman Mahaveer Open University Kota, Rajasthan

July' 2004 – June' 2007



M.Tech in Information Technology

Karnataka, Mysore

July' 2007 – June' 2009



EXPERIENCE

21+ Years (18.7(Acad.)+ 3.5(Research))



Professor & Director; Research Mentor

Department of CSE/IT | School of Engineering
Shobhit University Gangoh

July' 2020 – Now || January' 06 – June' 09



Professor

Department of Computer Science & Engineering
Graphic Era Hill University, Dehradun

July' 2019 – June' 2020



Associate Professor & HoD || Professor

Alternate Director - Outcome

Dept. of CSE / IT - Amity University Rajasthan
(AUR), Jaipur

August' 2013 – June' 2019



RESEARCH IMPACT

H – Index: 26; **SCOPUS H – Index:** 17;

i10 – Index: 50; **Citations:** 2000+

PUBLICATIONS:

As a Guest Editor

Edited Books:	6 Published, Springer 1 Accepted, Springer
Conference Proceedings:	11 Published, Springer 6 Accepted, in Springer
Special Issue(s)	6 Published 2 Accepted

As an Author

Book Chapter in Edited Books: 06

Total Paper Publications: 130

- ✓ In SCI Indexed Journals: 22 (Cum. I.F.: 62+)
- ✓ Only Scopus Indexed Journals: 30
- ✓ Scopus Indexed Conferences: 56
- ✓ 7 Papers in Press; 02 Papers are under Review

❖ **International Conferences Organized: 12 & 3 are in Progress.**



RECOGNITIONS

- Best Researcher Award – ITS Foundation
- Managing Guest Editor – IJSWCC - Bentham Science Publishers
- Amity University Mauritius, on Deputation
- CSIR, New Delhi - Travel Grant award for academic visit at Singapore (2013)
- Microsoft Research India, Travel Grant for academic visit at Brisbane, Australia (2012)
- SERB-DST, New Delhi, India for academic visit at Penang, Malaysia

Grant Received

- ❖ **All India Council for Technical Education (AICTE)** – (F. No. 67-13/IDC/GOC/POLICY-4/2022-23) – 4,00,000/- for Organizing International Conference
- ❖ **Council of Scientific & Industrial Research (CSIR)** – (Grant sanction letter No. Sym/12098/23-HRD) – 35,000/- for Organizing International Conference
- ❖ **Council of Scientific & Industrial Research (CSIR)** – (Grant sanction letter No. SYM/10830/22-HRD) – 1,00,000/- for Organizing International Conference

AICTE-IDEA Lab - F. No. AICTE/IDC/IDEA Lab/2023 (AQIS ID: IDEA202005164)

Career History: 21+ Years (18.7 Years in Academic)+ 3.5 Years (Research)

Duration	Designation	Organization
July 2020 – Till Now	Professor – CSE; Dean Academics	Shobhit University, Gangoh
July 2019 – June 2020	Professor	Department of Computer Science and Engineering, Graphic Era Hill University, Dehradun
July 2016 – July 2019	Associate Professor & Head	Department of Computer Science and Engineering/IT, ASET - Amity University Rajasthan, Jaipur, India
August 2013 – July 2016	Assistant Professor	AIIT, Amity University Rajasthan, Jaipur, India
July 2009 – July 2013	Research Scholar (F/T)	Department of Applied Science & Engineering, Indian Institute of Technology Roorkee
January 2006 – June 2009	Sr. Lecturer	Shobhit Institute of Engineering & Technology, Gangoh, Saharanpur, U.P., India (<i>now Shobhit University, Gangoh</i>)
June 2004 – January 2006	Lecturer	Teerthankar Mahaveer Institute of Management & Technology, Moradabad (<i>now TMU University</i>)
January 2002 – May 2004	Lecturer	Institute of management Studies (IMS), Roorkee
January 2001 – Dec 2001	Software Developer	Numeron Integrated Solutions, Noida – 6

**** 03 months at Amity Institute of Higher Education, Mauritius - On Deputation (March 2014 – May 2014) as Professor & Head – IT**

Academic Profile (All in First Division)

Year	Course	Area	Institute & University/Board	Div.
2009 – 2013	PhD (Full Time)	Computational Intelligence	Indian Institute of Technology (IIT), Roorkee, India	'A'
1998 – 2001	MCA	Computer Applications	Shri Guru Ram Rai Institute of Technology & Science (SGRRITS), Dehradun (<i>Now SGRR University</i>), Uttarakhand	1 st
2004 – 2007	MBA	Marketing & IT	Vardhaman Mahaveer Open University (VMOU), Kota	1 st
1994 – 1997	BSc	Physics, Chemistry & Mathematics	KLDAV Degree College, Roorkee, Uttarakhand, India CCS University Meerut	1 st
1993 – 1994	XII	Physics, Chemistry & Mathematics	Atomic Energy Central School, Narora, U.P., India CBSE Board	1 st

1991 – 1992	X	Science, Social Science, English, Hindi & Mathematics	Atomic Energy Central School, Narora, U.P., India CBSE Board	1 st
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Research Publications: 120

Ph.D. Thesis: **ENHANCED ARTIFICIAL BEE COLONY VARIANTS AND THEIR APPLICATIONS**

Peer reviewed articles (Intl) **46**

Conferences **57**

Book chapters **06**

Edited Conference Proceedings **10**

Edited Book **05**

Communicated:

Papers

07 Papers

Edited Books

01 (With Springer)

Research Interests

Nature Inspired Computing, Hybridization of Stochastic Algorithms, Optimization

Academic Advising

❖ **PhD – 07 Awarded; 2 is in Submission Process and 5 In Progress.**

❖ M. Tech Dissertation – 15

❖ B. Tech Dissertations (Projects) –50

Detailed List of Publications

❖ Edited Books (Online)

1. Soft Computing: Theories and Applications: Proceedings of SoCTA 2022 in Lecture Notes in Networks and Systems (LNNS, volume 627). Rajesh Kumar, Ajit Kumar Verma, Tarun K Sharma, Om Prakash Verma, Sanjay Sharma (Eds) (eISBN-978-981-19-9858-4) **2023**. <https://doi.org/10.1007/978-981-19-9858-4>
1. Artificial Intelligence in Cyber Security: Theories and Applications. Ed. Tushar Bhardwaj, Himanshu Upadhyay, Tarun Kumar Sharma, Steven Lawrence Fernandes. Intelligent Systems Reference Library, Springer <https://link.springer.com/book/9783031285806> **2023**
2. Butterfly Optimization Algorithm: Theory and Engineering Applications by Tarun Kumar Sharma and Om Prakash Verma. SpringerBriefs in Computational Intelligence (Series Title: SpringerBriefs in Applied Sciences and Technology), Springer <https://link.springer.com/book/10.1007/978-981-19-3767-5>
3. Emerging Technologies in Computer Engineering: Cognitive Computing and Intelligent IoT. Valentina E. Balas, G. R. Sinha, Basant Agarwal, Tarun Kumar Sharma, Pankaj Dadheech, Mehul Mahrishi (Eds). Communications in Computer and Information Science (CCIS, volume 1591), Springer. <https://link.springer.com/book/10.1007/978-3-031-07012-9> [e-ISBN: 978-3-031-07012-9] **2022**
4. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series, Springer – **2021**, Volume 1. (Indexed in SCOPUS): <https://www.springer.com/gp/book/9789811617393> [ISBN 978-981-16-1740-9]
5. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series, Springer – **2021**, Volume 2. (Indexed in SCOPUS): <https://www.springer.com/gp/book/9789811616952> [ISBN 978-981-16-1696-9]
6. Congress on Advances in Materials Science and Engineering in Lecture Notes in Mechanical Engineering (LNME) Series of Springer. **2021**, (Indexed in SCOPUS): <https://www.springer.com/gp/book/9789811609411> [ISBN 978-981-16-0941-1]
7. Congress on Advances in Mechanical and Systems Engineering (CAMSE) in Lecture Notes in Mechanical Engineering (LNME) Series of Springer. **2021**, (Indexed in SCOPUS)

8. Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems, Springer Nature Singapore [ISBN 10.1007/978-981-19-0707-4] 2022, (Indexed in SCOPUS)
9. Artificial Intelligence in Industrial Applications - Approaches to Solve the Intrinsic Industrial Optimization Problems. Learning and Analytics in Intelligent Systems. Springer - 2021. (<https://www.springer.com/series/16172>)
10. Computational Network Application Tools for Performance Analysis, Asset Analytics, Springer (<https://www.springer.com/gp/book/9789813295841>) - 2020
11. Performance of Integrated Systems and its Software Engineering Applications, Asset Analytics, Springer (<https://www.springer.com/gp/book/9789811382529>) - 2020
12. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series, Springer - 2020
13. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series (AISC, volume 583), Springer, Singapore. Ed(s). M Pant, K Ray, TK Sharma, S Rawat, A Bandyopadhyay, Springer Singapore 1, 1 - 730, 2017
14. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series (AISC, volume 584), Springer, Singapore. Ed(s). M Pant, K Ray, TK Sharma, S Rawat, A Bandyopadhyay, Springer Singapore 2, 1 - 730, 2017
15. Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing book series (AISC), Springer, Singapore. Ed(s). K Ray, TK Sharma, S Rawat, A Bandyopadhyay, RK Saini Springer Singapore 1, 2018

❖ Edited Special Issue

1. Congress on Advances in Mechanical and Systems Engineering (CAMSE) in Materials Today: Proceedings (Elsevier). 2023, <https://www.sciencedirect.com/journal/materials-today-proceedings/vol/80/part/P1>

❖ Book Chapters

1. **Sharma, T. K.** and Millie Pant. Swarm Intelligence in Pulp and Paper Process Optimization, in Applications of Metaheuristics in Process Engineering, Published by Springer International Publishing, pp 123-151 (ISBN 978-3-319-06507-6) (Date: 14 June 2014) (Editors: Jayaraman Valadi, Patrick Siarry): http://link.springer.com/chapter/10.1007/978-3-319-06508-3_5
2. **Sharma, T. K.** Swarm Intelligence in Software Engineering Design Problems, in Evolutionary Computation: Techniques and Applications (Section 1. Theory and Applications in Engineering Systems), Apple Academic Press Inc: Taylor and Francis. (Editors: Ashish M. Gujarathi, B. V. Babu)(Pub Date: February 2016): <http://www.appleacademicpress.com/title.php?id=9781771883368>
3. **Sharma, T. K.** (2016). Application of Shuffled Frog Leaping Algorithm in Software Project Scheduling. In P. Saxena, D. Singh, & M. Pant (Eds.) Problem Solving and Uncertainty Modeling through Optimization and Soft Computing Applications (pp. 225-238). Hershey, PA: Information Science Reference. doi:10.4018/978-1-4666-9885-7.ch011: <http://www.igi-global.com/chapter/application-of-shuffled-frog-leaping-algorithm-in-software-project-scheduling/147093>
4. **Sharma, T. K.** (2018). Estimating Software Reliability growth model parameter using opposition based Shuffled frog leaping algorithm. Studies in Computational Intelligence, Springer, Volume Number:761, Soft Computing Applications, Pages 149-164. ISBN:978-981-10-8048-7: https://link.springer.com/chapter/10.1007/978-981-10-8049-4_8
5. Rishi Sinhal, **Tarun Kumar Sharma**, Irshad Ahmad Ansari and Varun Bajaj Blind image watermarking with efficient dual restoration feature. Advanced Security Solutions for Multimedia. Irshad Ahmad Ansari and Varun Bajaj (Ed.). IOP Publsiher, DOI:10.1088/978-0-7503-3735-9ch1 2021
6. Nonlinear Mathematical Modeling and Energy Optimization of Multiple-Stage Evaporator Amalgamated with Thermo-Vapor Compressor. Renewable Energy Systems: Modeling, Optimization and Applications, Wiley

1. Himanshu Gupta, Om Prakash Verma, **Tarun Kumar Sharma**, Hirdesh Varshney, Saurabh Agarwal & Wooguil Pak, Ship detection using ensemble deep learning techniques from synthetic aperture radar imagery. Scientific Reports – Nature (2024) **(IF: 3.8)**
2. Sumit Singh Dhanda; Brahmjit Singh; Chia-Chen Lin; Poonam Jindal; Deepak Panwar; **Tarun Kumar Sharma**, Saurabh Agarwal, Wooguil Pak "A fast and efficient 191-bit Elliptic Curve Cryptographic Processor using a Hybrid Karatsuba Multiplier for IoT Applications," in IEEE Access, doi: 10.1109/ACCESS.2024.3472650. (2024) **(IF: 3.4)**
3. Amit Gupta, Priya Mathur, Deepak Panwar, **Tarun Kumar Sharma**. Soft Computing approaches for prediction of Specific Heat Capacity of hybrid nanofluids. Expert Systems (2024) **(IF: 3.3)**
4. Deepak Panwar, Sumit Dhanda, Brahmjit, Poonam Jindal, **Tarun Kumar Sharma**. 6G-Enabled Internet of Medical Things. Expert Systems (2024) **(IF: 3.3)**
5. Jitendra Rajpurohit and **Tarun Kumar Sharma**, Chaotic active swarm motion in jellyfish search optimizer. International Journal of System Assurance Engineering and Management (2022). <https://doi.org/10.1007/s13198-021-01561-6> **(IF: 2.0)**
6. Yadav, D., Sharma, T.K., Sharma, V., Verma, O.P. Optimizing the energy efficiency of multiple effect evaporator house using metaheuristic approaches. International Journal of System Assurance Engineering and Management (2021). <https://doi.org/10.1007/s13198-021-01429-9> **(IF: 2.0)**
7. Hirawat, A., Taterh, S., Sharma, T.K. A public domain dataset to recognize driver entry into and exit from a car using smartphone sensors. International Journal of System Assurance Engineering and Management (2021). <https://doi.org/10.1007/s13198-021-01194-9> **(IF: 2.0)**
8. Dawit Kiros Redie, Abdulhakim Edao Sirko, Tensaie Melkamu Demissie, Semagn Sisay Teferi, Vimal Kumar Shrivastava, Om Prakash Verma & **Tarun Kumar Sharma**. Diagnosis of COVID-19 using chest X-ray images based on modified DarkCovidNet model. Evolutionary Intelligence, 2022. <https://doi.org/10.1007/s12065-021-00679-7> **(IF: 2.6)**
9. Himanshu Gupta, K. Sreelakshmy, Om Prakash Verma, **Tarun Kumar Sharma**, Chang Wook Ahn, Kapil Kumar Goyal, Synergetic fusion of Reinforcement Learning, Grey Wolf, and Archimedes optimization algorithms for efficient health emergency response via unmanned aerial vehicle. Expert Systems, <https://doi.org/10.1111/exsy.13224> **(IF: 2.812)** (2022)
10. Siddhi Jain, Rahul Sahni, Tuneer Khargonkar, Himanshu Gupta, Om Prakash Verma, Tarun Kumar Sharma, Tushar Bhardwaj, Saurabh Agarwal *, Hyunsung Kim Automatic Rice Disease Detection and Assistance Framework using Deep Learning and Chatbot, Electronics, MDPI **(IF: 2.9)** (2022)
11. Amit Hirawat, Swapnesh Taterth, **Tarun K. Sharma**, A dynamic window-size based segmentation technique to detect driver entry and exit from a car, Journal of King Saud University: Computer and Information Sciences, Elsevier <https://doi.org/10.1016/j.jksuci.2021.08.028> **(IF: 13.473)** (2021)
12. Himanshu Gupta, Hirdesh Varshney, **Tarun Kumar Sharma**, Nikhil Pachauri, Om Prakash Verma, Comparative Performance Analysis of Quantum Machine Learning with Deep Learning for Diabetes Prediction, Complex & Intelligent Systems, Springer. <https://doi.org/10.1007/s40747-021-00398-7> **(IF: 5.8)** (2021)
13. H Gupta, S Kumar, D Yadav, OP Verma, **Tarun Kumar Sharma**, CW Ahn, JH Lee, Data Analytics and Mathematical Modeling for Simulating the Dynamics of COVID-19 Epidemic—A Case Study of India. Electronics, MDPI, 10(2), 127 **(IF: 2.9)** (2021)
14. **Tarun Kumar Sharma**, Enhanced Butterfly Optimization Algorithm for Reliability Optimization Problems Journal of Ambient Intelligence and Humanized Computing <https://doi.org/10.1007/s12652-020-02481-2> **(IF: 7.104)** (SCI Indexed) (2020)
15. Varun Sharma, Sanjay Sharma, Om Prakash Verma, Bhuvnesh Bhardwaj, **Tarun Kumar Sharma**, Nikhil Pachauri, Prediction and Optimization of Abrasive Wear Loss of Ultrahigh Strength Martensitic Steel using Response Surface Methodology, Harris Hawk and Artificial Neural Network, International Journal of System Assurance Engineering and Management, Springer (<https://doi.org/10.1007/s13198-021-01160-5>)- 2021 **(IF: 2.0)**
16. **Tarun Kumar Sharma** and Divya Prakash, Air pollution emissions control using shuffled frog leaping algorithm. International Journal of System Assurance Engineering and Management, Springer (2019) <https://doi.org/10.1007/s13198-019-00860-3> **(IF: 2.0)**
17. **Tarun Kumar Sharma** and Ajith Abraham, Artificial Bee Colony with Enhanced Food Locations for Solving Mechanical Engineering Design problems, Ambient Intelligence and Humanized Computing, Springer (DOI: 10.1007/s12652-019-01265-7) **(IF: 7.104)** (SCI Indexed) (2019)

18. Preeti Gupta, **Tarun Kumar Sharma**, Deepti Mehrotra and Ajith Abraham, Knowledge building through optimized classification rule set generation using Genetic Based Elitist Multi Objective Approach In Neural Computing and Applications (NCAA), Springer, DOI: 10.1007/s00521-017-3042-4, (IF: 6.0) (SCI Indexed). **2017**.
19. **Tarun Kumar Sharma** and Millie Pant, Opposition Based Learning ingrained Shuffled Frog-Leaping Algorithm. Journal of Computational Science, Elsevier, Volume 21, Pages 307-315 (IF: 3.976) (SCI Indexed), **2017** (IF: 3.3)
20. **Tarun Kumar Sharma** and Millie Pant, Identification of noise in multi noise plant using enhanced version of shuffled frog leaping algorithm, International Journal of Systems Assurance Engineering and Management, Springer (DOI: 10.1007/s13198-016-0466-7) (0976-4348), Volume 9, Issue 1, pp 43-51, 2016 (Scopus Indexed). **2016** (IF: 2.0)
21. **Tarun Kumar Sharma** and Millie Pant, Shuffled Artificial Bee Colony Algorithm. Soft Computing, 2016 (DOI: 10.1007/s00500-016-2166-2) (ISSN: 1433-7479) (IF: 4.1) (SCI Indexed). **2016** Volume 21, Issue 20, pp 6085-6104 (IF: 4.1)
22. **Tarun Kumar Sharma** and Millie Pant, Distribution in the Placement of Food in Artificial Bee Colony based on Changing Factor, International Journal of Systems Assurance Engineering and Management, 8(1), 159-172 Springer (DOI :10.1007/s13198-016-0495-2) (0976-4348), **2017**. (Scopus Indexed). (IF: 2.0)
23. Preeti Gupta, Deepti Mehrotra, **Tarun Kumar Sharma**, Role of decision tree in supplementing tacit knowledge for Hypothetico-Deduction in higher education, International Journal of Systems Assurance Engineering and Management, 9(1):82-90 (DOI: 10.1007/s13198-016-0483-6) (0976-4348), 2016 (Scopus Indexed). **2016** (IF: 2.0)
24. **Tarun Kumar Sharma** and Millie Pant, Enhancing the Food Locations in an Artificial Bee Colony Algorithm", Soft Computing, Springer, 17(10), pp. 1939 - 1965, 2013 (DOI: 10.1007/s00500-013-1029-3) (ISSN: 1433-7479) (IF: 2016 Impact Factor **4.1**) (SCI Indexed). **2013**
25. **Tarun Kumar Sharma**, Millie Pant and Mohar Singh, Nature Inspired Metaheuristic Techniques as Powerful Optimizers in Paper Industry, Materials and Manufacturing Processes, Taylor and Francis, 28(7), pp. 788 - 802, 2013 (DOI: 10.1080/10426914.2012.736650) (ISSN: 1532-2475). (IF: **4.783**) (SCI Indexed). **2013**
26. Pravesh Kumar, Sushil Kumar, **Tarun Kumar Sharma** and Millie Pant. Bi-level Thresholding Using PSO, Artificial Bee Colony and MRLDE embedded with Otsu Method", Memetic Computing, Springer. 5(4), pp. 323-334 (DOI 10.1007/s12293-013-0123-5), 2013. (ISSN: 1865-9292). (IF: **5.900**) (SCI Indexed). **2013**

❖ SCOPUS or Web of Science – Indexed Publications

1. Gourav Jain, Tripti Mahara, S. C. Sharma, Om Prakash Verma, and Tarun Sharma. Clustering-Based Recommendation System for Preliminary Disease Detection. International Journal of E-Health and Medical Communications (IJEHMC) 13(4), 2022. DOI: 10.4018/IJEHMC.313191
2. Pachauri, N., Yadav, D., **Sharma, T.K.**, Verma, O.P., Controller design for optimal operation of Multiple Effect Evaporator of Paper Mills. Results in Control and Optimization, Elsevier. 2022
3. Pachauri, N., Yadav, D., **Sharma, T.K.**, Verma, O.P., Ahn, C.W. Closed loop fractional order drug delivery control scheme for chemotherapy. Results in Control and Optimization, 2022, 6, 100097.
4. **Tarun Kumar Sharma**, Ajith Abraham and Jitendra Rajpurohit, Enhanced Shuffled Frog Leaping Algorithm with Modified Memplexes, International Journal of Sensors, Wireless Communications and Control. Bentham Science Publishers. (DOI : [0.2174/2210327910999201120092512](https://doi.org/10.2174/2210327910999201120092512)) – **2021**
5. Parul Goyal, Ashok Kumar Sahoo, **Tarun Kumar Sharma**, Pramod K. Singh, Internet of Things: Applications, security and privacy: A survey, Materials Today: Proceedings, Elsevier, Volume 34, Part 3, **2021**, Pages 752-759. <https://doi.org/10.1016/j.matpr.2020.04.737>
6. **Tarun Kumar Sharma**, A. Kumar Sahoo and P. Goyal, Bidirectional butterfly optimization algorithm and engineering applications, Materials Today: Proceedings, Elsevier, Volume 34, Part 3, **2021**, Pages 736-741 <https://doi.org/10.1016/j.matpr.2020.04.679>
7. Parul Goyal, Ashok Kumar Sahoo, **Tarun Kumar Sharma** Internet of things: Architecture and enabling technologies, Materials Today: Proceedings, Elsevier, Volume 34, Part 3, **2021**, Pages 719-735, <https://doi.org/10.1016/j.matpr.2020.04.678>
8. **Tarun Kumar Sharma** and Ajith Abraham, Non-linear Simplex Shuffled Frog Leaping Algorithm, International Journal of Computer Information Systems and Industrial Management Applications, Vol. 12, pp. 93 – 103, **2020**

9. **Tarun Kumar Sharma** and Jitendra Rajpurohit, Local search strategy embedded ABC and its application in cost optimization model of project time schedule, International Journal of Applied Metaheuristic Computing (IJAMC), 10(1), 92 – 106. **2019**
10. Jitendra Rajpurohit, **Tarun Kumar Sharma**, Ajith Abraham and Vaishali, Glossary of Metaheuristic Algorithms, International Journal of Computer Information Systems and Industrial Management Applications. Volume 9, pp. 181-205, (2150-7988), (Scopus Indexed). **2017**
11. **Tarun Kumar Sharma**, Performance Optimization of the Paper Mill using Opposition based Shuffled frog-leaping algorithm, International Journal of Computer Information Systems and Industrial Management Applications. Volume 9 pp. 173-180, (2150-7988), (Scopus Indexed). **2017**
12. **Tarun Kumar Sharma** and Millie Pant, Application of Aesthetic Differential Evolution in Identification of Noisy Sources in a Multi Noise Plant, International Journal of Computer Information Systems and Industrial Management Applications, 8, pp. 301-311 (ISSN: 2150-7988). (Scopus Indexed). **2016**
13. Ajeet Singh Poonia, **Tarun Kumar Sharma***, Shweta Sharma, Jitendra Rajpurohit, Aesthetic Differential Evolution Algorithm for Solving Computationally Expensive Optimization Problems. In Advances in Nature and Biologically Inspired Computing, Volume 419 of the series Advances in Intelligent Systems and Computing pp 87-96, 2016. (Scopus Indexed). **2016**
14. **Tarun Kumar Sharma** and Millie Pant. Improved Search Mechanism in ABC and its Application in Engineering, Journal of Engineering Science & Technology (JESTEC) 10(1), 111 – 133 (2015). (ISSN: 1823-4690). (Scopus Indexed), **2015**
15. **Tarun Kumar Sharma**, Millie Pant, Ferrante Neri, Changing factor based food sources in artificial bee colony, IEEE SSCI 2014, 1 – 7, 2014, Orlando, Florida, USA. (Scopus Indexed). **2014**
16. **Tarun Kumar Sharma** and Millie Pant, "Enhancing Different Phases of Artificial Bee Colony for Continuous Global Optimization Problems", Int. J. Advanced Intelligence Paradigms, Vol. 5, Nos. 1/2, 2013, USA Inderscience Publication, **2013**. (ISSN: 1755-0394) (Scopus Indexed)
17. **Tarun Kumar Sharma** and Millie Pant. Redundancy Level Optimization in Modular Software System Models using ABC. International Journal of Intelligent Systems and Applications (IJISA) pp.40-48, 6(4), 40 (ISSN: 2074-9058), (**2014**). (Scopus Indexed)
18. Preeti Gupta, Deepti Mehrotra, **Tarun Kumar Sharma**, Identifying knowledge indicators in Higher Education Organization, Elsevier Procedia Computer Science, 46 (2015) 449 – 456. (Scopus Indexed)
19. Shweta Sharma, **Tarun Kumar Sharma**, Millie Pant, Jitendra Rajpurohit, Bhagyashri Naruka, Centroid Mutation Embedded Shuffled Leap Frog Algorithm, Elsevier Procedia Computer Science, 46(**2015**), 127 – 134. (Scopus Indexed)
20. Preeti Gupta, **Tarun Kumar Sharma**, Deepti Mehrotra, Implementation of Genetic Algorithm for developing knowledge centric environment in higher education, International Journal of Hybrid Intelligent Systems, vol. 14, no. 1-2, pp. 13-19, **2017**. ISSN 1448-5869 (P)
21. Vaishali, **Tarun Kumar Sharma**, Modified Mutation in Asynchronous Differential Evolution. International Journal of Applied Evolutionary Computation (IJAE) 9 (1), 52-63, **2018**.
22. Katyanai Kashyap, **Tarun Kumar Sharma**, Dynamic Logistic Map Based Spread Spectrum Modulation in Wireless Channels. International Journal of Applied Evolutionary Computation (IJAE),9(2), pp. 52-65, **2018**.

❖ **Conference Publications:** (Peer Reviewed Articles Published (or in press) in International Conferences)

1. Verma, S., Verma, O.P., Gupta, H., **Sharma, T.K.**, Agarwal, S. (2025). AI-Driven Efficient and Reliable Anti-UAV Monitoring System Using Sensor Data Fusion: A Short Report. In: Kumar, R., Verma, A.K., Verma, O.P., Rajpurohit, J. (eds) Soft Computing: Theories and Applications. SoCTA 2024. Lecture Notes in Networks and Systems, vol 1343. Springer, Singapore. https://doi.org/10.1007/978-981-96-5955-5_52
2. Agarwal, S., **Sharma, T.K.**, Verma, O.P. (2025). Unveiling the Truth: A Survey of Digital Image Forensic Software Tools. In: Kumar, R., Verma, A.K., Verma, O.P., Rajpurohit, J. (eds) Soft Computing: Theories and Applications. SoCTA 2024. Lecture Notes in Networks and Systems, vol 1343. Springer, Singapore. https://doi.org/10.1007/978-981-96-5955-5_50
3. Jain, S., **Sharma, T.K.**, Kumar, N. (2025). Analysis of Supervised Machine Learning Algorithms on Polycystic Ovary Syndrome Based on Age Segmentation in India. In: Kumar, R., Verma, A.K., Verma, O.P., Rajpurohit, J. (eds) Soft Computing: Theories and Applications. SoCTA 2024. Lecture Notes in Networks and Systems, vol 1344. Springer, Singapore. https://doi.org/10.1007/978-981-96-5958-6_30

4. Kumar, N., **Sharma, T.K.**, Jain, S. (2025). Diabetes Prediction in Females Using Machine Learning Algorithms. In: Kumar, R., Verma, A.K., Verma, O.P., Rajpurohit, J. (eds) Soft Computing: Theories and Applications. SoCTA 2024. Lecture Notes in Networks and Systems, vol 1344. Springer, Singapore. https://doi.org/10.1007/978-981-96-5958-6_33
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❖ Communicated in SCI & SCOPUS Indexed Journals AND International Conferences

1. A public domain dataset to recognize driver entry into and exit from a car using smartphone sensors. International Journal of System Assurance Engineering and Management, Springer
2. Detecting driver entry and exit from a car using smartphone as a sensor platform. Journal of King Saud University - Computer and Information Sciences, Elsevier
3. Whale Optimization based Closed Loop Two Degree of Freedom Fractional Order Drug Delivery Control Scheme for Chemotherapy. *Journal of Ambient Intelligence and Humanized Computing*, Springer

4. A metaheuristic-driven approach to optimize Steam Economy of Multiple Effect Evaporator house of Kraft Recovery Process. *Process Integration and Optimization for Sustainability*, Springer (R1 submitted)
5. A Relative Standardization of Review-Rating System for Recommendation Engines and Product Ranking Algorithms. *Multimedia Tools and Applications*, Springer
6. Clustering based Recommendation System for preliminary disease detection. *International Journal of E-Health and Medical Communications (IJEHMC)*, IGI Global Journal
7. Optimizing the Energy Efficiency of Multiple Effect Evaporator house using metaheuristic approaches. *International Journal of System Assurance Engineering and Management*, Springer
8. Two Degree of Freedom Fractional Order Closed Loop Drug Delivery Control Scheme for Chemotherapy. *Computer Methods and Programs in Biomedicine*, Elsevier.

Sponsored Project

Topic	Funding Agency	Duration	Role
Development of a Scalable and Optimized Electricity Generating Walking Platform as a Source of Clean Energy	Department of Science and Technology, Govt. of Rajasthan	2018 - 2021	PI

Honors' and Awards

2020	Best Researcher Award – ITS Foundation 2020	ITS Foundation Jaipur
2018	Nominated for maximum <i>Scopus Indexed</i> Publications	Amity University Rajasthan
2017	Certificate of Outstanding Contribution in Reviewing, <i>Applied Soft Computing</i> , Elsevier	June 2017, Elsevier
2013	Travel Grant award (Full Air Fare) to attend the IEEE Symposium Series on Computational Intelligence at Singapore	Council of Scientific and Industrial Research (CSIR), New Delhi
2012	Paper Selected in Kaspersky Lab IT Security for the Next Generation – Asia Pacific & MEA Cup 2012 held at Hong Kong	Kaspersky Lab
2012	Travel Grant award to attend IEEE World Congress Computational Intelligence - 2012 (IEEE CEC-2012), at Brisbane, Australia	Microsoft Research India
2011	Partial Travel Grant award to attend the IEEE Symposium Series on Computational Intelligence at Paris, France	Alumni Association, IIT Roorkee
2011	Full Travel Grant award to attend Sixth International Conference on Bio - Inspired Computing Theories and Application (BIC-TA 2011), Penang, Malaysia	Department of Science & Technology (DST), New Delhi, India.

Courses taught at PhD, PG/M.Tech and UG/BTech levels:

1. Nature Inspired Computing
2. Computer Based Optimization Techniques
3. Advance Computer Architecture
4. Computer Based Optimization Techniques
5. Software Engineering
6. Neural Network and Fuzzy Logic
7. Big Data Analytics using Python

Reviewer of Journals

- 1 Applied Soft Computing, Elsevier
- 2 IEEE Access, IEEE
- 6 Journal of King Saud University - Computer and Information Sciences
- 7 International Journal of Green Energy - Taylor & Francis

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|---|--|
| 3 Soft Computing, Springer | 8 Journal of Experimental & Theoretical Artificial Intelligence, Taylor & Francis |
| 4 Journal of Industrial and Production Engineering, Taylor & Francis | 9 IEEE Transactions on Industrial Informatics |
| 5 IEEE Transactions on Cybernetics | 10 International Journal of System Assurance Engineering and Management, Springer |

Meetings

- ❖ Research proposal Meeting at Rajasthan Technical University, Kota
- ❖ Research Collaboration, Bundelkhand University Jhansi, U.P.
- ❖ MIR Labs collaboration meeting at Mumbai University, Mumbai

Invited Lectures/Expert Talks

S.No	Title of the Talk	Venue	Activity
1.	AI Transformation in Higher Education: Role of Faculty in Institutionalizing AI Technology	ASSOCHAM National Council on Education, Online Mode (20 th January, 2021)	Invited Talk
2.	Hybridization in Nature Inspired Computing	4 th International Conference on "Emerging Technologies in Computer Engineering: Data Science and Blockchain Technology (ICETCE-2021). Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur	Invited Talk
3.	Swarm Intelligence & Nature Inspired Algorithms	International Conference Artificial Intelligence and E-Leadership (AIEL 2020), Plovdiv Tech Park, Plovdiv city, Bulgaria	Invited Talk
4.	Data Science: Tools & Techniques	Dr. B. R. Ambedkar N. I. T. Jalandhar	Expert talk
5.	Research Publications and Publication Ethics	Dr. B. R. Ambedkar N. I. T. Jalandhar	Expert talk
6.	Computational Intelligence and Applications	Dr. B. R. Ambedkar N. I. T. Jalandhar	Expert talk
7.	Swarm Intelligence & Nature Inspired Algorithms	Swami Keshvanand Institute of Technology, Management & Gramothan, Ramnagar, Jagatpura, Jaipur	Expert talk
8.	Nature Inspired Computing	Bundelkhand University, Jhansi	Expert Lecture
9.	Soft Computing and Machine Learning	Department of Computer Science & Engineering, Govt. college of Engineering & Technology (GCET, Bikaner), Rajasthan	Expert Lecture
10.	Swarm Intelligence techniques	6 th International Conference on System Modeling & Advancement in Research Trends (SMART) – 2017, TMU Moradabad	Invited talk
11.	Smart Cities & AI	St. Xaviers College, Jaipur, Rajasthan	Guest Lecture

Administrative responsibilities

1. **Director** School of Engineering & Technology, Shobhit Institute of Engineering & Technology (Deemed to-be) University, Meerut, U.P.
2. **Dean** School of Engineering & Technology, Shobhit University Gangoh, Saharanpur, U.P.
3. Research Programmes, Publications and Organizing Workshops/Conferences
4. **NAAC & NIRF committees**
5. **Faculty Coordinator** - Department of Computer Science and Engineering/IT, Amity School of Engineering & Technology (ASET), Amity University Rajasthan, Jaipur. (July 2016 – Till date)

6. **Alternate Director Outcome** - Amity University Rajasthan (February 2017 – Till Date)
7. **Board of Studies** – CSE/IT, Amity School of Engineering & Technology (ASET)
8. **Library Committee** - Amity University Rajasthan since May 2017
9. **Proctorial Board** - Amity University Rajasthan since February 2017
10. **Evaluation Committee [ESE December-2017 & December 2018]** - Amity University Rajasthan
11. **Flying Squad for ESE-May-June,2018** - Amity University Rajasthan
12. **Member, Core Functional Committee Amity Science, Technology and Innovation Foundation (ASTIF)** - Amity University Rajasthan
13. **Member of Industrial Advisory Council** – ASET, Amity University Rajasthan
14. **NAAC & NIRF committees** - ASET, Amity University Rajasthan

Lab Establishments

- ❖ Robotics Automation & Internet of Things at Amity University Rajasthan, Jaipur
- ❖ Soft Computing Lab (*in process*)
- ❖ AICTE-IDEA Lab

International Conferences Organized

- ✓ SoCTA2021 – (7th International conference on Soft Computing: Theories and Applications – 2022) – UIT, HPU Shimla, Himachal Pradesh - <http://socta.in/socta2022/>
- ✓ SoCTA2021 – (6th International conference on Soft Computing: Theories and Applications – 2021) - (IIIT Kota (MNIT, Jaipur Campus) Jaipur, Rajasthan - <http://socta.in/socta2021/>
- ✓ CAMSE2020 – (2nd International Congress on Advances in Mechanical and Systems Engineering– 2021) – Dr. B. R. Ambedkar NIT Jalandhar in Virtual format - <http://camse.in/>
- ✓ CAMSE2020 – (1st International Congress on Advances in Materials Science and Engineering – 2020) – In association with Shobhit University Rajasthan and NIT Jalandhar in Virtual format - <http://2020.camse.in/>
- ✓ SoCTA2020 – (5th International conference on Soft Computing: Theories and Applications – 2019) - (Virtual format) - <http://socta.in/socta2020/>
- ✓ SoCTA2019 – (4th International conference on Soft Computing: Theories and Applications – 2019) - (NIT Patna, Bihar) - <http://socta.in/socta2019/>
- ✓ SoCTA2018 – (3rd International conference on Soft Computing: Theories and Applications – 2018) - (Dr. B. R. Ambedkar NIT Jalandhar, Punjab) - <http://2018.socta.in/>
- ✓ SoCTA2017 (2nd International conference on Soft Computing: Theories and Applications 2017) – Bundelkhand University Jhansi - <http://2017.socta.in/>
- ✓ SoCTA2016 (International conference on Soft Computing: Theories and Applications – 2016) - Amity University Rajasthan - <http://2016.socta.in/>
- ✓ Organizing Secretary – SocProS2015 (5th International Conference on Soft Computing for Problem Solving) (http://www.scrs.in/socpros15/organizing_committees.php)

International Workshops & Guest Lecture Organized

- ✓ **Indo-USA one week workshop** on Computational Intelligence and Optimization Tools (CIOT-2017), 21 – 25 August 2017, Amity University Rajasthan, Jaipur
- ✓ International Seminar on Soft Computing and Machine Learning, 8 – 9 August 2016, Amity University Rajasthan, Jaipur
- ✓ Metaheuristics by **Prof. Atulya Nagar, Liverpool Hope University, U.K.**, 6 January 2013, Amity University Rajasthan, Jaipur
- ✓ Neural Network and applications by **Prof. Ajith Abraham, Director MIR Labs, USA** 10 January 2016
- ✓ Data Mining and Applications, by **Prof. Ajith Abraham, Director MIR Labs, USA** 10-11 June 2017

Recognitions

❖ Edited Guest Issues in International Journals

- ✓ International Journal of System Assurance Engineering and Management, Springer – Special Issue on: Soft Computing Tools for Complex Decision Making <https://www.springer.com/engineering/industrial+management/journal/13198> (2019)
- ✓ International Journal of Intelligent Systems Technologies and Applications, Inderscience – Special Issue on: Nature-Inspired Computing in Image and Video Processing: <https://www.inderscience.com/jhome.php?jcode=ijista> (2019)
- ✓ International Journal of Integrated Supply Management, Inderscience - Special Issue on: Computational Intelligence in Supply Chain Management: <https://www.inderscience.com/jhome.php?jcode=ijism> (2019)
- ✓ International Journal of Intelligent Engineering Informatics, Inderscience - Special Issue on: Hybrid Intelligent Algorithms: <https://www.inderscience.com/jhome.php?jcode=ijiei> (2019)
- ✓ International Journal of Intelligent Systems Technologies and Applications - Special Issue on: Nature-Inspired Computing in Image and Video Processing: <http://www.inderscience.com/jhome.php?jcode=IJISTA> (2018)
- ✓ International Journal of Integrated Supply Management - Special Issue on: Computational Intelligence in Supply Chain Management: <http://www.inderscience.com/jhome.php?jcode=ijism> (2018)
- ✓ International Journal of Advanced Intelligence Paradigms (IJAIP) - Special Issue on: Intelligent Solutions to Industrial Problems through Swarm Intelligence Algorithms: <http://www.inderscience.com/info/ingeneral/cfplist.php?jcode=ijaip>
- ✓ International Journal of Swarm Intelligence Research (IJSIR) - Special Issue On: Hybrid Swarm Intelligence Algorithms and Engineering Applications: <http://www.igi-global.com/calls-for-papers-special/international-journal-swarm-intelligence-research/1149>
- ✓ International Journal of Applied Metaheuristic Computing (IJAMC), IGI Global - Special Issue On: Intelligent Solutions to Engineering Design Problems: <http://www.igi-global.com/calls-for-papers-special/international-journal-applied-metaheuristic-computing/1139>
- ✓ International Journal of Applied Evolutionary Computation (IAEC) -Special Issue On: Modern Hybrid Heuristic Optimization Techniques <http://www.igi-global.com/calls-for-papers-special/international-journal-applied-evolutionary-computation/1127>
- ✓ International Journal of Intelligent Systems Design and Computing (IJISDC) - Special Issue On: Intelligent Solutions to Computer Network Problems through Modern Heuristics: <http://www.inderscience.com/jhome.php?jcode=ijisdc>

❖ Editorial Board

- ✓ International Journal of Hybrid Intelligence <https://www.inderscience.com/jhome.php?jcode=ijhi>
- ✓ International Journals Progress in Human Computer Interaction <http://ojs.whioce.com/index.php/phci/about/editorialTeam>
- ✓ MATRIX Academic International Online Journal of Engineering and Technology. <http://maioj.org/editor-advisory-board/>
- ✓ Artificial Intelligence and Applications, Scientific Online Publishing, USA. <http://www.scipublish.com/journals/AIA/apc> (20/11/2013 - 19/11/2015)
- ✓ Global Journal of Computers & Technology (ISSN: 2394-501X) <http://gpcpublishing.com/index.php?journal=gjct&page=about&op=editorialTeam>

❖ Associate-Editor

- ✓ International Journal of Computational Intelligence Techniques, BioInfo Publication <http://www.bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000221&detail=editorial#>
- ✓ International Journal of Computer Information Systems and Industrial Management Applications (ISSN 2150-7988) <http://www.mirlabs.net/ijcisim/editorial.php>

❖ Executive Guest Editor

- ✓ International Journal of Sensors, Wireless Communications and Control. Bentham Science Publishers (Scopus Indexed)

Workshops Attended:

- ✓ One week workshop on Recent Advances in Optimization Techniques and their Applications (RAOTA), IIT Roorkee, Roorkee.
- ✓ One day International Seminar on "Machine Intelligence System", Institution of Engineers, Roorkee. (MIR Day Celebration)
- ✓ Half Day Workshop on Code management and Debugging for Efficient Soft Computing, December 26, 2013
- ✓ One Day Workshop on Soft Computing for Problem Solving, December 27, 2013
- ✓ Four Days Workshop (8th – 11th July 2014) on Data Science and Big Data Analytics, organized by AUR, Jaipur.
- ✓ Participated in three days Oracle Academy workshop: "Creating Java Programs with Greenfoot", 22nd – 24th Dec 2015 at AIIT, AUR, Jaipur.
- ✓ Indo-USA one week workshop on Computational Intelligence and Optimization Tools (CIOT-2017), 21 – 25 August 2017, Amity University Rajasthan, Jaipur
- ✓ International Seminar on Soft Computing and Machine Learning, 8 – 9 August 2016, Amity University Rajasthan, Jaipur

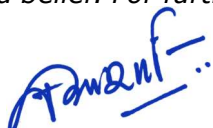
Foreign Visits

Mauritius	: On deputation at Amity Institute of Higher Education (AIHE) 2014
Singapore	: To present paper research paper in IEEE SSCI 2013.
Australia	: To present paper research paper in IEEE SSCI 2012.
France	: To present paper research paper in IEEE SSCI 2011.
Malaysia	: To present paper research paper in BICTA 2011.
USA	: Personal Visit in 2010

Personal Information

Gender	: Male
Date of Birth	: 5 th July 1977
Fathers Name	: Sh. Ashok Kumar (Retd. as SO/SD from NPCL)
Mothers Name	: Late. Smt. Rajbala Sharma (House Wife)
Spouse	: Dr. Divya Prakash (Professor & Dean (Biotechnology and Environmental Engg.), Shobhit University Gangoh, Saharanpur
Son(s)	: Mr. Aarav Sharma & Mr. Abeer Sharma (12 Year & 10 Year Old)
Permanent Address	: H.No. 06, Pawan Dham, Pant Vihar (Near Rajas Hair Dresser) – Saharanpur Pin: 247001, U.P.

I hereby state that the statements made above are true to the best of my knowledge and belief. For further information, please feel free to contact me.


Tarun Kumar Sharma

References:

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