



# Dr. Tarun K. Sharma

Ph.D. (IIT Roorkee), MCA, M.Tech, MBA

Scopus H - Index: 14 || Google H - Index: 20  
i -10 Index: 33 || Citation: 1250+

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

## My Contact

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## Research Impact

- **Ph.D. Supervision: 04** Awarded || 6 in Progress
- **100+ Scopus** Indexed Publications
- **22 SCI Papers** (70+ cumulative I.F.)
- **15 Edited Books** with SpringerNature
- **1 Authored Book** with Springer Briefs
- **6 Books Chapters** in Edited Books



## Grants Received

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

## Education Background

- **Indian Institute of Technology (IIT) Roorkee**  
*Ph.D in Computational Intelligence*  
July 2009 – Awarded in September, 2013
- **SGRRITS Dehradun**  
*Master in Computer Applications*  
July 1998 – June 2001
- **Vardhaman Mahaveer Open University Kota**  
*Master in Business Administration in Mktg./IT*  
Completed in 2017
- **KSOU, Karnataka, Mysore**  
*M.Tech. (IT)*  
Completed in 2010

## About Me

Academician and researcher in the domain of **Computational Intelligence** with an experience and exposure of **19+ Years**. He obtained his doctorate from **Indian Institute of Technology (IIT) Roorkee**, making seminal contribution in the area of **Computational Intelligence**. His profile includes a stint of over 6 years at Associate Professor & Head – Department of Computer Science & Engineering / IT as well as Alternate Director-Outcome, Amity University Rajasthan, Jaipur, where he played a pivotal role in designing and developing Syllabus and Labs in alignment of Industry 4.0 and as per the National Education Policy (NEP) 2020. **He has organized 13 International Conferences with the proceedings in SpringerNature and Elsevier. Established AICTE-IDEA Lab – F. No. AICTE/IDC/IDEA Lab/2023 (AQIS ID: IDEA202005164)**

## Professional Experience

**Shobhit Deemed University Meerut**

July 2020– Present

**Graphic Era Hill University Dehradun**

July 2019 – June 2020

**Amity University Rajasthan, Jaipur**

August 2013 – June 2019

## Administrative Responsibilities'

- Director – CSE, SIET (Deemed to-be) University, Meerut, U.P.
- Dean School of Engineering & Technology, Shobhit University Gangoh
- Research Programmes, Publications and Organizing Conferences/FDP
- NAAC & NIRF committees
- Faculty Coordinator – Department of Computer Science and Engineering/IT, Amity School of Engineering & Technology (ASET), Amity University Rajasthan, Jaipur.
- Alternate Director Outcome
- Board of Studies
- Introduce/Design – New Courses/Programmes in the light of NEP2020
- Set up of New Labs.
- Library Committee
- Proctorial Board
- Evaluation Committee
- Flying Squad
- Member of Industrial Advisory Council

## Achievements

- Best Researcher Award – ITSR 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 Penag, Malaysia

# Dr. Tarun Kumar Sharma

Academician, Researcher and Administrator

## Brief Profile

**Dr. Tarun K. Sharma**, born on July 5, 1977 in Roorkee (Uttarakhand) and completed his basic education from Atomic Energy Central School (AECS) Narora, Dist. Bulandshahr in First Class. He completed his graduation (B.Sc (PCM)) and post graduation (MCA) from KLDV Degree College Roorkee and SGRRITS Dehradun in the year 1997 and 2001 respectively with First Division.

He obtained his doctorate (Full Time) from Indian Institute of Technology (IIT) Roorkee in 2013, making seminal contribution in the area of Computational Intelligence.

He also did M.Tech (IT) from Karnataka State Open University in 2009 and MBA (Mktg & IT) in 2007 from Vardhman Mahaveer Open University Kota, Rajasthan.

At present he is the Professor in CSE, Faculty of Engineering & Technology, SHOBHIT INSTITUTE OF ENGINEERING & TECHNOLOGY (NAAC Accredited Grade 'A' Deemed-to-be University), Meerut (U.P.). Prior to this he was Professor at Graphic Era Hill University Dehradun where he taught from July 2019 – May 2020. His profile includes a stint of over 6 years at Associate Professor & Head – Department of Computer Science & Engineering / IT as well as Alternate Director – Outcome, Amity University Rajasthan, Jaipur, where he played a pivotal role in designing and developing Syllabus and Labs in alignment of Industry 4.0 and as per the National Education Policy (NEP) 2020. He has been to Amity Institute of Higher Education Mauritius on deputation.

He teaches a variety of courses to UG, PG & Doctoral students including Soft Computing, Data Science, Machine Learning, Software Engineering, and Optimization.

He is a recipient of the coveted Microsoft Research India travel award to visit Australia. He has also availed travel grants from CSIR, New Delhi and DST New Delhi; Singapore and Malaysia respectively to present the research papers in the conference of high repute.

He has supervised 4 Ph. D., 6 are in process, 12 M.Tech Dissertations, several MCA Projects and B.Tech Projects. He has over 80 research publications in International Journal (SCI & SCOPUS), Chapters in edited books, Conferences of repute (Scopus) and has over 1200+ Google citations to his research work with H-Index of 20; i10 Index of 33. He has received grants from CSIR (1 Lacs), Ministry of Science & Technology, Govt. of India and AICTE (4 Lacs) for organizing International events. He has edited 11 volumes of Conference Proceedings published by AISC and LNME series of Springer (SCOPUS) Publication, two edited books with Asset Analytics, SpringerNature and 4 edited books in SpringerNature Series, Indexed in Scopus.

He served as an editorial board member and reviewer of national and international journals.

He is a founding member of International Conference on Soft Computing: Theories and Applications (SoCTA Series) ([www.socta.in](http://www.socta.in)), Congress on Advances in Materials Science and Engineering (CAMSE) ([www.camse.in](http://www.camse.in)); Recent Advances in Sustainable Environment (RAiSE 2022) (<http://raise.stemrs.in/>) and STEM Research Society ([www.stemrs.in](http://www.stemrs.in)).

His personal URL is <https://tanusharma0.wixsite.com/tarunksharma>

## Personal Information

**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 Deemed University, Meerut

**Son(s)** : Mr. Aarav Sharma & Mr. Abeer Sharma (10 Year & 8 Year Old)



**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: 18 Years (Academic)+ 3.5 Years (Research)**

Duration	Designation	Organization
<b>July 2020 – Till Now</b>	Professor, HoD-CSE & Director – School of Engineering & Technology	Shobhit Institute of Engineering & Technology (Deemed to-be) University, Meerut
July 2019 – June 2020	Professor	Department of Computer Science and Engineering, Graphic Era Hill University, Dehradun
August 2013 – July 2019	Associate Professor & Head	Department of Computer Science and Engineering/IT, ASET - 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.
2013	PhD ( <b>Full Time</b> )	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 <sup>st</sup>
2008 - 2010	M.Tech	IT	KSOU Karnataka	1 <sup>st</sup>
2004-2007	MBA	Marketing & IT	Vardhaman Mahaveer Open University (VMOU), Kota	1 <sup>st</sup>
1994 – 1997	BSc	Physics, Chemistry & Mathematics	KLDAV Degree College, Roorkee, Uttarakhand, India CCS University Meerut	1 <sup>st</sup>
1993 – 1994	XII	Physics, Chemistry &	Atomic Energy Central School, Narora, U.P., India CBSE Board	1 <sup>st</sup>

1991 – 1992	X	Mathematics Science, Social Science, English, Hindi & Mathematics	Atomic Energy Central School, Narora, U.P., India CBSE Board	1 <sup>st</sup>
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### Research Publications: 90

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

Peer reviewed articles (Intl) **33**

Conferences **49**

Book chapters **05**

Edited Conference Proceedings **10**

Edited Book **05**

### Communicated:

**Papers 03 Papers**

**Edited Books 02 (With Springer)**

### Research Interests

Nature Inspired Computing, Hybridization of Stochastic Algorithms, Optimization

### Academic Advising

❖ **PhD – 04 Awarded; 1 is in Submission Process and 3 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](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](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

#### ❖ SCI – Indexed with Impact Factor

1. 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)
2. 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)
3. 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)
4. 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)
5. 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)
6. 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)
7. 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)
8. 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)
9. 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)
10. **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)
11. 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)
12. **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)
13. **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)
14. 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.
15. **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)

- 16. 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)**
- 17. 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**)
- 18. 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**)
- 19. 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)**
- 20. 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**
- 21. 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**
- 22. 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 (IJAEC) 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 (IJAEC),9(2), pp. 52-65, **2018**.

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

1. M Varshney, P Kumar, TK SharmaCS-Jaya: Hybridization of Cuckoo and Jaya Algorithm. In: Kumar, R., Verma, A.K., Sharma, T.K., Verma, O.P., Sharma, S. (eds) Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems, vol 627. Springer, Singapore. [https://doi.org/10.1007/978-981-19-9858-4\\_73](https://doi.org/10.1007/978-981-19-9858-4_73)
2. Sumit Singh Dhanda, Tarun Kumar Sharma, Brahmjit Singh, Poonam Jindal & Deepak Panwar 6G-Enabled Internet of Medical Things. In: Kumar, R., Verma, A.K., Sharma, T.K., Verma, O.P., Sharma, S. (eds) Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems, vol 627. Springer, Singapore. [https://doi.org/10.1007/978-981-19-9858-4\\_7](https://doi.org/10.1007/978-981-19-9858-4_7)
3. Sebastián Basterrech, Tarun Kumar Sharma, Re-visiting Reservoir Computing architectures optimized by Evolutionary Algorithms. In proceedings of 14th World Congress on Nature and Biologically Inspired Computing (NaBIC 2022), Lecture Notes in Networks and Systems 425, Springer Nature (2023) [https://link.springer.com/chapter/10.1007/978-3-031-27524-1\\_81](https://link.springer.com/chapter/10.1007/978-3-031-27524-1_81) (2023)
4. Jitendra Rajpurohit and **Tarun K. Sharma** A Greedy Jellyfish Search Optimization Algorithm. Proceedings of 3rd International Conference on Machine Learning, Advances in Computing, Renewable Energy and Communication. Lecture Notes in Electrical Engineering, vol 915. Springer, Singapore. [https://doi.org/10.1007/978-981-19-2828-4\\_69](https://doi.org/10.1007/978-981-19-2828-4_69)
5. Manish Srivastava, Smitarani Pati, Om Prakash Verma, **Tarun Kumar Sharma**, Himanshu Gupta, Raj Kumar Arya, Anurag Kumar Tiwari, and Deepak Sahu. Minimization of Trim Loss During Reel



Cutting at Paper Mill by Using Different Optimization Algorithms. Recent Advances in Mechanical Engineering, Lecture Notes in Mechanical Engineering. Springer Nature Singapore (2022)

6. Ambuj Kumar Agarwal, Raj Gaurang Tiwari, Vikas Khullar, Rakesh Ahuja, and **Tarun K. Sharma**. Measuring the Bytecode Quality of Object-Oriented Software. IN International Conference on Soft Computing: Theories and Applications, Lecture Notes in Networks and Systems 425, Springer, [https://doi.org/10.1007/978-981-19-0707-4\\_5](https://doi.org/10.1007/978-981-19-0707-4_5) (2022)
7. Anuj Kumar, **Tarun K. Sharma**, Om Prakash Verma, Ajeet Singh Poonia, and Marut Bisht. COVID-19 Cases in India: Prediction and Analysis using Machine Learning. In International Conference on Soft Computing: Theories and Applications, Lecture Notes in Networks and Systems 425, Springer Nature, [https://doi.org/10.1007/978-981-19-0707-4\\_50](https://doi.org/10.1007/978-981-19-0707-4_50) (2022)
8. Jitendra Rajpurohit and Tarun K. Sharma. A Hybrid Metaheuristic for Transmission Tower Design Optimization. In International Conference on Soft Computing: Theories and Applications, Lecture Notes in Networks and Systems 425, Springer Nature, [https://doi.org/10.1007/978-981-19-0707-4\\_77](https://doi.org/10.1007/978-981-19-0707-4_77) (2022)
9. Jitendra Rajpurohit and Tarun K. Sharma. An Enhanced Sine-Cosine Algorithm with Balanced Exploration and Exploitation. In International Conference on Soft Computing: Theories and Applications, Lecture Notes in Networks and Systems 425, Springer Nature [https://doi.org/10.1007/978-981-19-0707-4\\_81](https://doi.org/10.1007/978-981-19-0707-4_81) (2022)
10. Ambuj Kumar Agarwal, Lekha Rani, Raj Gaurang Tiwari, **Tarun Kumar Sharma** and Pradeepta Kumar Sarangi. Honey encryption: fortification beyond the brute-force impediment. In Congress on Advances in Materials Science and Engineering (CAMSE2020), Lecture Notes in Mechanical Engineering (LNME) Springer, **2020**
11. Nikhil Pachauri, Drishti Yadav, **Tarun Kumar Sharma**, Varun Sharma, and Om Prakash Verma, Towards the Real-Time Control of Nonlinear Multiple Stage Evaporators: Design of IMC with Process Delay. In Congress on Advances in Materials Science and Engineering (CAMSE2020), Lecture Notes in Mechanical Engineering (LNME) Springer, **2020**
12. Hirdesh Varshney, Utpal Kant, Himanshu Gupta, Om Prakash Verma, **Tarun Kumar Sharma** and Irshad Ahmad Ansari. Semantic Segmentation of Retinal Blood Vessel with Autoencoders, In Soft Computing: Theories and Applications (SoCTA2020), AISC, Springer Verlag, December **2020**
13. **Tarun Kumar Sharma** and Chang Wook Ahn Synergetic Butterfly Optimization Algorithm. In The 9th International Conference on Smart Media and Applications (SMA 2020), Jeju, Republic of Korea, ACM Proceedings September **2020**.
14. **Tarun Kumar Sharma** and Ajith Abraham, Age Distribution Adjustments in Human Resource Department using Shuffled Frog Leaping Algorithm. In 19th International Conference Intelligent Systems Design and Applications (ISDA 2019), AISC, Springer Verlag, December
15. **Sharma T.K.**, Rajpurohit J., Prakash D. (**2020**) Enhanced Local Search in Shuffled Frog Leaping Algorithm. In: Pant M., Sharma T., Verma O., Singla R., Sikander A. (eds) Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, vol 1053, pp. 1441-1448. Springer, Singapore.
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17. **Tarun Kumar Sharma** and Millie Pant, "Mixed DE - ABC Algorithm for Global Optimization Problems", In Proceedings of ACCT, Rohtak, India, pp. 296 - 301, January 2011. ISBN: 978-981-08-7932-7.
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19. **Tarun Kumar Sharma** and Millie Pant, "Intermediate Population Based Differential Evolution Algorithm", In Proceedings of Computational Intelligence and Information Technology Communications in Computer and Information Science, Springer Berlin Heidelberg Volume 250, 2011, pp 152-156. (ISBN: 978-3-642-25734-6) (Scopus Indexed)
20. **Tarun Kumar Sharma**, Millie Pant and Ajith Abraham, "Dichotomous search in ABC and its application in parameter estimation of software reliability growth models", In Proceedings of Third World Congress on Nature and Biologically Inspired Computing (NaBIC), 2011 pp. 207-212, Salamanca, Spain. (ISBN: 978-1-4577-1122-0)
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Communication Technologies (WICT), 2011, 171 - 175, Mumbai, India. (ISBN: 978-1-4673-0127-5)

22. **Tarun Kumar Sharma** and Millie Pant, "PSO Embedded Artificial Bee Colony Algorithm", 20 - 22nd Oct. 2011, In Proceedings of IETET 2011, pp. 243-247, Kurukshetra, India.
23. **Tarun Kumar Sharma**, Millie Pant and V.P. Singh, "Artificial Bee Colony Algorithm with Self Adaptive Colony Size", In Proceedings of Swarm, Evolutionary, and Memetic Computing Lecture Notes in Computer Science, Springer Berlin Heidelberg Volume 7076, 2011, pp 593-600. (ISBN: 978-3-642-27172-4) (Scopus Indexed)
24. **Tarun Kumar Sharma** and Millie Pant, "PSO Ingrained Artificial Bee Colony Algorithm For Solving Continuous Optimization Problems", In Proceedings of IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE), 2011, Penag, Malaysia. pp. 119-123. (ISBN: 978-1-4577-2058-1)
25. **Tarun Kumar Sharma** and Millie Pant, "Enhancing Scout Bee Movements in Artificial Bee Colony Algorithm", In Proceedings of the International Conference on Soft Computing for Problem Solving (SocProS 2011) December 20-22, 2011 Advances in Intelligent and Soft Computing, Springer Berlin Heidelberg Volume 130, 2012, pp 601-610. (ISBN: 978-81-322-0487-9) (Scopus Indexed)
26. **Tarun Kumar Sharma** and Millie Pant, "Enhancing Different Phases of Artificial Bee Colony for Continuous Global Optimization Problems", In Proceedings of the International Conference on Soft Computing for Problem Solving (SocProS 2011) December 20-22, 2011 Advances in Intelligent and Soft Computing, Springer Berlin Heidelberg Volume 130, 2012, pp 715-724. (ISBN: 978-81-322-0487-9) (Scopus Indexed)
27. **Tarun Kumar Sharma** and Millie Pant, "Golden Search based Artificial Bee Colony Algorithm and its Application to Solve Engineering Design Problems", In Proceedings of Second International Conference on Advanced Computing & Communication Technologies (ACCT), IEEE 2012, Rohtak India. pp. 156-160, 2012. (ISBN: 978-1- 4673-0471-9)
28. **Tarun Kumar Sharma** and Millie Pant, "Improved Swarm Bee Algorithm for Global Optimization Problems", In Proceedings of iRAFIT -2012, Patiala, India.
29. Sushil Kumar, **Tarun Kumar Sharma**, Millie Pant and A.K.Ray, "Adaptive Artificial Bee Colony for Segmentation of CT lung Images", In Proceedings of iRAFIT-2012 Patiala, India.
30. **Tarun Kumar Sharma**, Millie Pant, J.C. Bansal, Artificial Bee Colony with Mean Mutation Operator for Better Exploitation, In Proceedings of IEEE World Congress on Computational Intelligence (CEC), Brisbane, Australia, 2012, pp. 3050 - 3056. (ISBN: 978-1-4673-1510-4) (Scopus Indexed)
31. **Tarun Kumar Sharma**, Millie Pant, J.C. Bansal, Some Modifications to Enhance the Performance of Artificial Bee Colony, In Proceedings of IEEE World Congress on Computational Intelligence (CEC), Brisbane, Australia, 2012, pp. 3454 - 3461. (ISBN: 978-1-4673-1510-4) (Scopus Indexed)
32. **Tarun Kumar Sharma** and Millie Pant, "Modified Onlooker Phase in Artificial Bee Colony Algorithm", In proceedings Swarm, Evolutionary, and Memetic Computing, Lecture Notes in Computer Science, Springer Berlin Heidelberg Volume 7677, 2012, pp 339-347. (ISBN: 978-3-642-35380-2) (Scopus Indexed)
33. **Tarun Kumar Sharma**, Millie Pant and Aakash Deep, "Modified Foraging Process of Onlooker Bees in Artificial Bee Colony", In Proceedings of Seventh International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012) Advances in Intelligent Systems and Computing, Springer Berlin Heidelberg Volume 202, 2013, pp 479-487. (ISBN: 978-81-322-1041-2) (Scopus Indexed)
34. **Tarun Kumar Sharma**, Millie Pant and Chang Wook Ahn, "Improved Food Sources in Artificial Bee Colony", IEEE SSCI 2013, 95 -102, Singapore. INSPEC Accession Number: 13827030; Digital Object Identifier:10.1109/SIS.2013.6615165. (Scopus Indexed)
35. Tushar Bhardwaj, Manu Ram Pandit and **Tarun Kumar Sharma**, "A Safer Cloud", Data Isolation and Security by Tus-Man Protocol", In proceedings of second International Conference on Soft Computing for Problem Solving (SocProS 2012) in Advances in Intelligent Systems and Computing, Springer Berlin Heidelberg, December 2012, Jaipur, India. [ISBN: 978-81-322-1601-8] (Scopus Indexed)
36. **Tarun Kumar Sharma**, Millie Pant and Ajith Abraham, "Blend of Local and Global Variant of PSO in ABC", In Proceedings of IEEE Fifth World Congress on Nature and Biologically Inspired Computing (IEEE NaBIC), Fargo, USA, August 12-14, 2013, pp 113 - 119. (ISBN: 978-1-4799-1414-2)
37. Tushar Bhardwaj, **Tarun Kumar Sharma** and Manu Ram Pandit, "Social Engineering Prevention by detecting Malicious URLs using Artificial Bee Colony Algorithm", in proceedings of Third International Conference on Soft Computing for Problem Solving (SocProS 2013) in Advances in

Intelligent Systems and Computing, Springer Berlin Heidelberg, Vol. 259, pp 355-363, December 26 - 28, 2013 at Greater Noida Extension, Centre of IIT Roorkee, India. (ISBN 978-81-322-1767-1) (Scopus Indexed)

38. Jitendra Rajpurohit, **Tarun Kumar Sharma**, Millie Pant, Shweta Sharma, Bhagyashri Naruka, Dichotomous Search in Shuffled Leap Frog Algorithm, In: Proceedings of IEMCON - 2014, in Elsevier Science & Technology ISBN 9789351072485, Kolkata, India.
39. Bhagyashri Naruka, **Tarun Kumar Sharma**, Millie Pant, Jitendra Rajpurohit, Shweta Sharma, Two-Phase Shuffled Leap Frog Algorithm. In: Proceedings of 3rd International Conference on Reliability, Infocom Technologies and Optimization (ICRITO) (Trends and Future Directions), Noida pp 397 - 401, (ISSN: 978-1-4799-6895-4), IEEE Xplore.
40. **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)
41. Shweta Sharma, **Tarun Kumar Sharma**, Millie Pant, Jitendra Rajpurohit, Bhagyashri Naruka, Accelerated Shuffled frog-leaping algorithm, in Proceedings of Fourth International Conference on Soft Computing for Problem Solving (SocProS-2014) at NIT Silchar, Assam, Springer Berlin Heidelberg Advances in Intelligent Systems and Computing Volume 336, 2014, pp 181-189. (ISBN: 978-81-322-2220-0) (Scopus Indexed)
42. Bhagyashri Naruka, **Tarun Kumar Sharma**, Millie Pant, Shweta Sharma, Jitendra Rajpurohit, Differential Shuffled Frog Leaping Algorithm in Proceedings of Fourth International Conference on Soft Computing for Problem Solving (SocProS-2014) at NIT Silchar, Assam, Springer Berlin Heidelberg Advances in Intelligent Systems and Computing Volume 336, 2015, pp 245-253. (Scopus Indexed)
43. V.P. Singh and **Tarun Kumar Sharma**, Trigonometric Mutation Embedded Shuffled Frog-Leaping Algorithm, Advances in Software Engineering and Systems ; 14th International Conference on Software Engineering, Parallel and Distributed Systems (SEPADS'15), Dubai, United Arab Emirates February 22-24, 2015, pp. 52-57, 2015 (ISBN: 978-1-61804-277-4).
44. **Tarun Kumar Sharma**, Millie Pant, Improved Local Search in Shuffled Frog Leaping Algorithm, In Proceedings of Fifth International conference on Soft Computing for Problem Solving, 18 - 22 December 2015, AISC Series of Springer, IIT Roorkee. (Scopus Indexed)
45. Jitendra Rajpurohit, **Tarun Kumar Sharma** and Atulya Nagar, Shuffled Frog Leaping Algorithm with Adaptive Exploration, In Proceedings of Fifth International conference on Soft Computing for Problem Solving, 18 - 22 December 2015, AISC Series of Springer, IIT Roorkee. (Scopus Indexed)
46. Preeti Gupta, D Mehrotra, **Tarun Kumar Sharma**, Genetic based Weighted Aggregation model for optimization of student's performance in Higher Education, In Proceedings of Fifth International conference on Soft Computing for Problem Solving, 18 - 22 December 2015, AISC Series of Springer, IIT Roorkee. (Scopus Indexed)
47. **Tarun Kumar Sharma**, Ajeet Poonia, Jitendra Rajpurohit, Shweta Sharma, Aesthetic Differential Evolution Algorithm for Solving Computationally Expensive Optimization Problems, In Proceedings of 7th World Congress on Nature and Biologically Inspired Computing (NaBIC2015), Advances in Nature and Biologically Inspired Computing, Volume 419 of the series Advances in Intelligent Systems and Computing pp 87-96, 1 - 3 December 2015, Pietermaritzburg, South Africa. (Scopus Indexed)
48. Vaishali, **Tarun Kumar Sharma**, Asynchronous Differential Evolution with Convex Mutation, In Proceedings of Fifth International conference on Soft Computing for Problem Solving, 18 - 22 December 2015, AISC Series of Springer, IIT Roorkee. (Scopus Indexed)
49. Vaishali, **Tarun Kumar Sharma**, A Abraham, J Rajpurohit, Trigonometric Probability Tuning in Asynchronous Differential Evolution. In Proceedings of Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, vol 584. Springer, Singapore, pp. 267-278, 2018.
50. **Tarun Kumar Sharma**, Millie Pant, Opposition-Based Learning Embedded Shuffled Frog-Leaping Algorithm. Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, vol 583. Springer, Singapore, pp. 853-861, 2018.
51. N Mishra, **Tarun Kumar Sharma**, V Sharma, V Vimal, A Secure Framework for Data Security in Cloud Computing. In Proceedings of Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, vol 583. Springer, Singapore, Soft Computing: Theories and Applications 583, 61-71, 2018.
52. P Gupta, D Mehrotra, **Tarun Kumar Sharma**, Relevance Index for Inferred Knowledge in Higher Education Domain Using Data Mining. In Proceedings of Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, vol 584. Springer, Singapore, pp. 279-287, 2018.

53. NS Rajput, DD Shukla, L Ishan, **Tarun Kumar Sharma**, Optimization of Compressive Strength of Polymer Composite Brick Using Taguchi Method. In Proceedings of Soft Computing: Theories and Applications, Advances in Intelligent Systems and Computing, vol 584. Springer, Singapore, vol. 584, pp. 453-459, 2018.

#### ❖ 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 – ITSR Foundation 2020	ITSR Foundation Jaipur
2018	Nominated for maximum <i>Scopus Indexed</i> Publications	Amity University Rajasthan
2017	Certificate of Outstanding Contribution in Reviewing, Applied Soft Computing, 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	Department of Science &



on Bio - Inspired Computing Theories and Application (BIC-TA 2011), Penang, Malaysia	Technology (DST), New Delhi, India.
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#### 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
- 3 Soft Computing, Springer
- 4 Journal of Industrial and Production Engineering, Taylor & Francis
- 5 IEEE Transactions on Cybernetics
- 6 Journal of King Saud University - Computer and Information Sciences
- 7 International Journal of Green Energy - Taylor & Francis
- 8 Journal of Experimental & Theoretical Artificial Intelligence, Taylor & Francis
- 9 IEEE Transactions on Industrial Informatics
- 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 AITechnology	ASSOCHAM National Council on Education, Online Mode (20 <sup>th</sup> January, 2021)	Invited Talk
2.	Hybridization in Nature Inspired Computing	4 <sup>th</sup> 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	6th International Conference on System	Invited talk

	techniques	Modeling & Advancement in Research Trends (SMART) – 2017, TMU Moradabad	
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 – (7<sup>th</sup> International conference on Soft Computing: Theories and Applications – 2022) – UIT, HPU Shimla, Himachal Pradesh - <http://socta.in/socta2022/>
- ✓ SoCTA2021 – (6<sup>th</sup> International conference on Soft Computing: Theories and Applications – 2021) – (IIIT Kota (MNIT, Jaipur Campus) Jaipur, Rajasthan - <http://socta.in/socta2021/>
- ✓ CAMSE2020 – (2<sup>nd</sup> International Congress on Advances in Mechanical and Systems Engineering– 2021) – Dr. B. R. Ambedkar NIT Jalandhar in Virtual format - <http://camse.in/>
- ✓ CAMSE2020 – (1<sup>st</sup> 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 – (5<sup>th</sup> International conference on Soft Computing: Theories and Applications – 2019) – (Virtual format) - <http://socta.in/socta2020/>
- ✓ SoCTA2019 – (4<sup>th</sup> International conference on Soft Computing: Theories and Applications – 2019) – (NIT Patna, Bihar) - <http://socta.in/socta2019/>
- ✓ SoCTA2018 – (3<sup>rd</sup> International conference on Soft Computing: Theories and Applications – 2018) – (Dr. B. R. Ambedkar NIT Jalandhar, Punjab) - <http://2018.socta.in/>
- ✓ SoCTA2017 (2<sup>nd</sup> 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 (5<sup>th</sup> International Conference on Soft Computing for Problem Solving) ([http://www.scrs.in/socpros15/organizing\\_committees.php](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 (IJAE) -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)

#### ❖ 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

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

#### Personal Information

<b>Gender</b>	: Male
<b>Date of Birth</b>	: 5 <sup>th</sup> July 1977
<b>Fathers Name</b>	: Sh. Ashok Kumar (Retd. as SO/SD from NPCL)
<b>Mothers Name</b>	: Late. Smt. Rajbala Sharma (House Wife)
<b>Spouse</b>	: Dr. Divya Prakash (Professor & Dean (Biotechnology and Environmental Engg.), Shobhit University Gangoh, Saharanpur
<b>Son(s)</b>	: Mr. Aarav Sharma & Mr. Abeer Sharma (10 Year & 8 Year Old)
<b>Permanent Address</b>	: 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.*

  
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