

Publications

Journal Articles

1. Anuj Chandila, Shailesh Tiwari, KK Mishra, and Akash Punhani. "Environmental Adaption Method: A Heuristic Approach for Optimization". In: International Journal of Applied Metaheuristic Computing (IJAMC) 10.1 (2019), pp. 107–131.
2. Divya Kumar and KK Mishra. "Multi-Objective Optimization using Co-Variance Guided Artificial Bee Colony." In: Journal of Information Science & Engineering 34.2 (2018).
3. Anupam Biswas, Bhaskar Biswas, Anoj Kumar, and KK Mishra. "Particle swarm optimisation with time varying cognitive avoidance component". In: International Journal of Computational Science and Engineering 16.1 (2018), pp. 27–41.
4. KK Mishra, HK Limbu, A Dhungana, IS Jha, and D Adhikari. "Thermodynamic, Structural, Surface and Transport Properties of In-Tl Liquid Alloy at Different Temperatures". In: World Journal of Condensed Matter Physics 8.03 (2018), p. 91.
5. Shivendra Shivani, Shailendra Tiwari, Krishn K Mishra, Zhigao Zheng, and Arun K Sangaiah. "Providing security and privacy to huge and vulnerable songs repository using visual cryptography". In: Multimedia Tools and Applications (2018), pp. 1–20.
6. Naveen Kumar, Shailesh Tiwari, Zhigao Zheng, Krishn K Mishra, and Arun Kumar Sangaiah. "An efficient and provably secure time-limited key management scheme for outsourced data". In: Concurrency and Computation: Practice and Experience 30.15 (2018), e4498.
7. Arjun Arora, Nitin Rakesh, and Krishn K Mishra. "Analysis of Safety Applications in VANET for LTE Based Network". In: Networking Communication and Data Knowledge Engineering. Springer, 2018, pp. 141–154.
8. Weina Wang and Krishn Kumar Mishra. "A novel stock trading prediction and recommendation system". In: Multimedia Tools and Applications 77.4 (2018), pp. 4203–4215.
9. Divya Kumar and KK Mishra. "Co-variance guided Artificial Bee Colony". In: Applied Soft Computing 70 (2018), pp. 86–107.
10. Krishn Kumar Mishra, Hemant Bisht, Tribhuvan Singh, and Victor Chang. "A Direction Aware Particle Swarm Optimization with Sensitive Swarm Leader". In: Big Data Research (2018).
11. Zhigao Zheng, Nitin Saxena, KK Mishra, and Arun Kumar Sangaiah. "Guided dynamic particle swarm optimization for optimizing digital image watermarking in industry applications". In: Future Generation Computer Systems (2018).
12. Ashish Tripathi, Nitin Saxena, KK Mishra, and Arun Kumar Misra. "A nature inspired hybrid optimisation algorithm for dynamic environment with real parameter encoding". In: International Journal of Bio-Inspired Computation 10.1 (2017), pp. 24–32.

13. KK Mishra. "Recent advancements in computer, communication and computational sciences." In: *Journal of Intelligent and Fuzzy Systems* 32.5 (2017), p. 3229.
14. Manisha Chahal, Sandeep Harit, Krishn K Mishra, Arun Kumar Sangaiah, and Zhigao Zheng. "A survey on software-defined networking in vehicular ad hoc networks: Challenges, applications and use cases". In: *Sustainable cities and society* 35 (2017), pp. 830–840.
15. Divya Kumar and KK Mishra. "Portfolio optimization using novel co-variance guided Artificial Bee Colony algorithm". In: *Swarm and Evolutionary Computation* 33 (2017), pp. 119–130.
16. Nitin Saxena and K. K. Mishra. "Improved Multi-Objective Particle Swarm Optimization Algorithm for Optimizing Watermark Strength in Color Image Watermarking". In: *Applied Intelligence Preprint* (2016). issn: 1573-7497.
17. Divya Kumar and K. K. Mishra. "Co-variance Guided Artificial Bee Colony". In: *Swarm and Evolutionary Computation Preprint* (2016). issn: 2210-6502.
18. Bhavna Sharma, Ravi Prakash, Shailesh Tiwari, and K. K. Mishra. "A Variant of Environmental Adaptation Method with Real Parameter Encoding and its Application in Economic Load Dispatch Problem". In: *Applied Intelligence Preprint* (2016). issn: 1573-7497.
19. K. K. Mishra, Ashish Tripathi, Nitin Saxena, and Shailesh Tiwari. "Evolution Based Memetic Algorithm and its application in software cost estimation". In: *Journal of Intelligent and Fuzzy Systems Preprint* (2016)
20. Divya Kumar and K. K. Mishra. "Multi-objective optimization using co-variance guided Artificial Bee Colony". In: *Journal of Information Science and Engineering* 1016-2364 (2016).
21. Ashish Tripathi, Nitin Saxena, Krishn Kumar Mishra, and Arun Kumar Misra. "A Nature Inspired Hybrid Optimization Algorithm for Dynamic Environment with Real Parameter Encoding". In: *International Journal of Bio-Inspired Computation Preprint* (2016). [22] Anupam Biswas, Bhaskar Biswas, Anoj Kumar and K. K. Mishra. "Particle Swarm Optimization with Time Varying Cognitive Avoidance Component". In: *International Journal of Computational Science and Engineering* (2016).
22. K. K. Mishra, Vivek Sharma, Shailesh Tiwari and A. K. Misra. "Auto Adjustive Differential Evolution Algorithm". In: *Journal of Multiple-Valued Logic and Soft Computing Preprint* (2016).
23. Prince Bhatia, K. K. Mishra and A .K. Misra. "An Approach to Software Cost Estimation by Improved - Time Variant Acceleration Coefficient based PSO". In: *Journal of Multiple-Valued Logic and Soft Computing Preprint* (2016).
24. Prince Bhatia, Krishn Kumar Mishra, and Arun Kumar Misra. "An Approach to Software Cost Estimation by Improved-Time Variant Acceleration Coefficient Based PSO." In: *Journal of MultipleValued Logic & Soft Computing* 27.1 (2016).

25. Prince Bhatia, KK Mishra, Divya Kumar and Anoj Kumar. "An Improved-Time Varying Acceleration Coefficient Based PSO." In: *Journal of Multiple-Valued Logic & Soft Computing* 26 (2016).
26. Ashish Tripathi, Nitin Saxena, Krishn Kumar Mishra and Arun Kumar Misra. "An Environmental Adaption Method with real parameter encoding for dynamic environment". In: *Journal of Intelligent & Fuzzy Systems* 151678 (2015), pp. 1–13.
27. KK Mishra, Shailesh Tiwari, and Arun Kumar Misra. "Improved environmental adaption method and its application in test case generation". In: *Journal of Intelligent & Fuzzy Systems* 27.5 (2014), pp. 2305–2317.
28. KK Mishra, AK Misra, Peter Mueller, Gregorio Martinez Perez, Sanjiv K Bhatia, and Yong Wang. "Recent Advancements in Computer & Software Technology". In: *The Scientific World Journal* 2014 (2014).
29. Krishn Kumar Mishra, Anoj Kumar, and Arun Kumar Misra. "A novel approach for minimizing and prioritizing test suite". In: *Engineering Science Letters* 2014 (2014), Article–ID.
30. Rajul Kumar, K.K. Mishra, Ashish Tripathi, Abhinav Tomar, and Surendra Singh. "MSEA: Modified Symmetric Encryption Algorithm". In: *IACR Cryptology ePrint Archive* 2014 (2014), p. 280.
31. K. K. Mishra, Prince Bhatia, Shailesh Tiwari, and A. K. Misra. "A Novel Genetic Algorithm for Generating Prime Numbers". In: *Journal of Algorithms and Optimization* 0001 (2013), pp. 25–29.
32. Anupam Biswas, K.K. Mishra, Shailesh Tiwari and A.K. Misra. "Physics-inspired optimization algorithms: a survey". In: *Journal of Optimization* 2013 (2013).
33. Brajesh Kumar Singh, Shailesh Tiwari, K.K. Mishra and Arun Kumar Misra. "Tuning of cost drivers by significance occurrences and their calibration with novel software effort estimation method". In: *Advances in Software Engineering* 2013 (2013), p. 6.
34. Anoj Kumar, K.K. Mishra, and A.K. Misra. "Improving the Fault Detection Capability of Test suite Using Elitist Genetic Algorithm". In: *Engineering and Technology Research Academia Publishing* 1(1) (2013), pp. 001–013.
35. Shailesh Tiwari, KK Mishra, and AK Misra. "Regression Testing: A Spectrum-based Approach". In: *International Journal of Computer Applications* 55.18 (2012).
36. S. K. Harit, S. K. Saini, N. Tyagi and K.K. Mishra. "RSA Threshold Signature Based Node Eviction in Vehicular Ad Hoc Network". In: *Information Technology Journal* 11.8 (2012), pp. 980–988.
37. KK Mishra, Ashish Tripathi, and AK Misra. "A performance evaluation tool for behavioral analysis of students". In: *Journal of Applied Sciences* 12.15 (2012), p. 1572.
38. KK Mishra and Sandeep Harit. "A fast algorithm for finding the non dominated set in multiobjective optimization". In: *International Journal of Computer Applications* 1.25 (2010), p. 3539.

Papers in - Conference/Workshop/symposium

1. Tribhuvan Singh, Ranvijay Singh, and Krishn Kumar Mishra. "Software Cost Estimation Using Environmental Adaptation Method". In: *Procedia computer science* 143 (2018), pp. 325–332.
2. Nitin Saxena, KK Mishra, and Ashish Tripathi. "DWT-SVD-Based Color Image Watermarking Using Dynamic-PSO". In: *Advances in Computer and Computational Sciences*. Springer, 2018, pp. 343–351.
3. Arjun Arora, Nitin Rakesh, and Krishn K Mishra. "Scrutiny of VANET Protocols on the Basis of Communication Scenario and Implementation of WAVE 802.11 p/1609.4 with NS3 Using SUMO". In: *Advances in Computer and Computational Sciences*. Springer, 2017, pp. 355–371.
4. Arjun Arora, Nitin Rakesh, and Krishn K Mishra. "Reliable Packet Delivery in Vehicular Networks Using WAVE for Communication Among High Speed Vehicles". In: *Networking Communication and Data Knowledge Engineering*. Springer, 2018, pp. 65–77.
5. Darothi Sarkar, Nitin Rakesh, and Krishn K Mishra. "Broadcast Storm Problem A Hidden Consequence of Content Distribution in Content Delivery Networks". In: *Networking Communication and Data Knowledge Engineering*. Springer, 2018, pp. 155–165.
6. Priyanka Singh, KK Mishra, and Pragya Dwivedi. "Enhanced hybrid model for electricity load forecast through artificial neural network and Jaya algorithm". In: *Intelligent Computing and Control Systems (ICICCS), 2017 International Conference on*. IEEE. 2017, pp. 115–120.
7. Shashank Gupta, Divya Kumar, and KK Mishra. "Truss Structure Optimization Using Co-variance Based Artificial Bee Colony Algorithm". In: *International Conference in Swarm Intelligence*. Springer. 2016, pp. 174–183.
8. Arjun Arora, KK Mishra, and Nitin Rakesh. "Reconsidering the cloud approach towards VANET communication". In: *Parallel, Distributed and Grid Computing (PDGC), 2016 Fourth International Conference on*. IEEE. 2016, pp. 22–27.
9. Shailesh Tiwari, KK Mishra, Nitin Singh, and NR Rawal. "A New Particle Acceleration-Based Particle Swarm Optimization Algorithm". In: *International Conference in Swarm Intelligence*. Springer. 2016, pp. 314–321.
10. Richa Shukla, Bramah Hazela, Shashwat Shukla, Ravi Prakash, and K. K. Mishra. "Variant of Differential Evolution Algorithm". In: *Advances in Intelligent Systems and Computing*. Springer, 2016.
11. Arjun Arora, Nitin Rakesh, and K. K. Mishra. "Scrutiny of VANET Protocols on the Basis of Communication Scenario and Implementation of WAVE 802.11p/1609.4 with NS3 using SUMO". In: *Advances in Intelligent Systems and Computing*. Springer, 2016.

12. Nitin Saxena, K.K. Mishra, and Ashish Tripathi. "Optimizing Watermark Strength in DWT-SVD based Image Watermarking Scheme for Color Images using Dynamic-PSO". In: *Advances in Intelligent Systems and Computing*. Springer, 2016.
13. Tribhuvan Singh, Ankita Shukla, and K. K. Mishra. "Improved Environmental Adaption Method with Real Parameter Encoding for solving optimization problems". In: *Advances in Intelligent Systems and Computing*. Springer, 2016.
14. Divya Kumar and K. K. Mishra. "Artificial Bee Colony as a Frontier in Evolutionary Optimization: A Survey". In: *Advances in Intelligent Systems and Computing*. Springer, 2016.
15. Divya Kumar and KK Mishra. "The Impacts of Test Automation on Software's Cost, Quality and Time to Market". In: *Procedia Computer Science* 79 (2016), pp. 8–15.
16. Nitin Saxena, Ashish Tripathi, KK Mishra, and AK Misra. "Dynamic-PSO: An improved particle swarm optimizer". In: *Evolutionary Computation (CEC), 2015 IEEE Congress on*. IEEE. 2015, pp. 212– 219.
17. Divya Kumar and Krishn Kumar Mishra. "Incorporating logic in Artificial Bee Colony (ABC) algorithm to solve first order logic problems: The logical ABC". In: *Knowledge and Smart Technology (KST), 2015 7th International Conference on*. IEEE. 2015, pp. 65–70.
18. A. Tripathi, P. Garbyal, K. K. Mishra, and A. K. Misra. "Environmental adaption method for dynamic environment". In: *2014 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*. Oct. 2014, pp. 216–221. doi: 10.1109/SMC.2014.6973910.
19. Ritu Nigam, Alok Choudhary, and KK Mishra. "Non-dominated sorting environmental adaptation method (NS-EAM)". In: *Signal Processing and Integrated Networks (SPIN), 2014 International Conference on*. IEEE. 2014, pp. 595–600.
20. Arijit Biswas, Ajit Kumar, and KK Mishra. "Particle Swarm Optimization with cognitive avoidance component". In: *Advances in Computing, Communications and Informatics (ICACCI), 2013 International Conference on*. IEEE. 2013, pp. 149–154.
21. Sunita Tiwari, KK Mishra, and Arun Kumar Misra. "Test case generation for modified code using a variant of particle swarm optimization (PSO) algorithm". In: *Information Technology: New Generations (ITNG), 2013 Tenth International Conference on*. IEEE. 2013, pp. 363–368.
22. KK Mishra, Shailesh Tiwari, and AK Misra. "A bio inspired algorithm for solving optimization problems". In: *Computer and Communication Technology (ICCCT), 2011 2nd International Conference on*. IEEE. 2011, pp. 653–659.
23. Divya Kumar, Divya Kashyap, KK Mishra, and AK Mishra. "Routing path determination using QoS metrics and priority based evolutionary optimization". In: *High Performance Computing and Communications (HPCC), 2011 IEEE 13th International Conference on*. IEEE. 2011, pp. 615–621.
24. Shailesh Tiwari, KK Mishra, Anoj Kumar, and Arun Kumar Misra. "Spectrum-based fault localization in regression testing". In: *Information Technology: New*

- Generations (ITNG), 2011 Eighth International Conference on. IEEE. 2011, pp. 191–195.
25. Anoj Kumar, Shailesh Tiwari, KK Mishra, and AK Misra. “Notice of Retraction Generation of efficient test data using path selection strategy with elitist GA in regression testing”. In: Computer Science and Information Technology (ICCSIT), 2010 3rd IEEE International Conference on. Vol. 9. IEEE. 2010, pp. 389–393.
 26. KK Mishra, Shailesh Tiwari, Anoj Kumar, and AK Misra. “An approach for mutation testing using elitist genetic algorithm”. In: Computer Science and Information Technology (ICCSIT), 2010 3rd IEEE International Conference on. Vol. 5. IEEE. 2010, pp. 426–429.
 27. Divya Kumar, Divya Kashyap, KK Mishra, and AK Misra. “Security Vs cost: An issue of multiobjective optimization for choosing PGP algorithms”. In: Computer and Communication Technology (ICCCT), 2010 International Conference on. IEEE. 2010, pp. 532–535.
 28. Anoj Kumar, KK Mishra, and Arun Kumar Misra. “Generating Efficient Test Cases Using Genetic Algorithm.” In: IC-AI. 2010, pp. 126–130.
 29. Shailesh Tiwari, KK Mishra, Anoj Kumar, and AK Misra. “An Integrated Approach for Regression Testing using Program Spectra and Path Selection”. In: Proceedings of 2010 International Conference on Test and Measurement (ICTM2010). 2010.
 30. KK Mishra, Anoj Kumar, and AK Misra. “A variant of NSGA-II for solving priority based optimization problems”. In: Intelligent Computing and Intelligent Systems, 2009. ICIS 2009. IEEE International Conference on. Vol. 1. IEEE. 2009, pp. 612–615.
 31. K.K. Mishra, Brajesh Kumar Singh, Akash Punhani and Uma Singh. “Combining neural networks and genetic algorithms to predict and to maximize lemon grass oil production”. In: 2009 International Joint Conference on Computational Sciences and Optimization. IEEE. 2009, pp. 297–299.
 32. Anoj Kumar, KK Mishra, and Arun Kumar Misra. “Optimizing the reliability of communication network using specially designed genetic algorithm”. In: Nature & Biologically Inspired Computing, 2009. NaBIC 2009. World Congress on. IEEE. 2009, pp. 499–502.
 33. Brajesh Kumar Singh, Akash Punhani, KK Mishra, et al. “Hybrid computational method for optimizing isabgol production”. In: 2009 World Congress on Nature & Biologically Inspired Computing (NaBIC). 2009.
 34. K. K. Mishra, A. Kumar, and A. K. Misra. “A variant of NSGA-II for solving priority based optimization problems”. In: Intelligent Computing and Intelligent Systems, 2009. ICIS 2009. IEEE International Conference on. Vol. 1. Nov. 2009, pp. 612–615. doi: 10.1109/ICICISYS.2009.5357606.
 35. Krishn Mishra, Sandeep Harit, and Neeraj Tyagi. “Multi-Objective Optimization of Communication Network Using NSGA”. In: Proceedings of the 2009 International Conference on Genetic and Evolutionary Methods, GEM 2009, July 13-16, 2009, Las Vegas Nevada, USA. 2009, pp. 256–262.

36. Krishn Mishra, Nishant Chauhan, and Akash Punhani. "Predicting the Yield of Various Aromatic Plants With the Help of Neural Network". In: Proceedings of the 2009 International Conference on Artificial Intelligence, ICAI 2009, July 13-16, 2009, Las Vegas Nevada, USA, 2 Volumes. 2009, pp. 15–17.
37. K. K. Mishra, B. K. Singh, A. Punhani, and L. Sharma. "Optimizing melting rate and fuel consumption of rotary furnace using NSGA -II". In: 2008 IEEE Congress on Evolutionary Computation (IEEE World Congress on Computational Intelligence). June 2008, pp. 3783–3787. doi: 10.1109/CEC.2008.

Papers as - Book chapters

1. Shailesh Tiwari, KK Mishra, Nitin Saxena, Nitin Singh, and AK Misra. "Artificial Immune System Based MAC Layer Misbehavior Detection in MANET". In: Advanced Computer and Communication Engineering Technology. Springer, 2016, pp. 707–722.
2. Ashish Tripathi, Divya Kumar, Krishn Kumar Mishra, and Arun Kumar Misra. "GA-EAM Based Hybrid Algorithm". In: Intelligent Computing Theory. Springer, 2014, pp. 13–20.
3. KK Mishra, Shailesh Tiwari, and AK Misra. "Improved environmental adaption method for solving optimization problems". In: Computational Intelligence and Intelligent Systems. Springer, 2012, pp. 300–313.
4. KK Mishra, Shailesh Tiwari, and AK Misra. "Combining Non Revisiting Genetic Algorithm and Neural Network to Generate Test Cases for White Box Testing". In: Practical Applications of Intelligent Systems. Springer, 2011, pp. 373–380.
5. Gaurav Verma, Arun Kumar, and Krishna K Mishra. "A novel non-dominated sorting algorithm". In: Swarm, Evolutionary, and Memetic Computing. Springer, 2011, pp. 274–281.