

CURRICULUM - VITAE

Dr. Yugal Kumar

Department of Computer Science and Engineering

Jaypee University of Information Technology, Solan, India

M: - 9897709834

Email: yugalkumar.14@gmail.com

: yugal.kumar@juit.ac.in



Current Status

- Working as Assistant Professor (Senior Grade) in Department of Computer Science and Engineering, Jaypee University of Information Technology, Wakanghat, Solan, Himachal Pradesh, India.
- Having more than Fourteen years of Teaching and Ten years of Research Experiences.
- Ph.D. in Engineering (Computer Science and Engineering) from Department of Computer Science and Engineering, Birla Institute of Technology, Mesra, Ranchi, Jharkhand.
- Ph.D. Topic: “Development and Implementation of a New Hybrid Algorithm for Data Mining Task using Nature Inspired Model”
- Ph. D.: Awarded: 04, Submitted: 0, Ongoing: 02
- Cumulative SCI Impact Factor: 52.157
- Total Publications including Journal, Conference, Book Chapter and Book: 108

Journal (74)	SCI	18
	SCOPUS	60
	Peer Reviewed (Google Scholar)	71
	Communicated	3
Conference (20)	International	15
	National	5
Book Chapter (7)	Communicated	2
	Published/Accepted	7
Book (7)	On going	1
	Published	6

Citation Indices

Google Scholar	Citation Indices	All	Since 2017
	Citations	1149	989
	H-index	20	19
	i10-index	29	24

Scopus	Citation indices	All
	Citations	594
	H-index	16

Web of Science	Citation indices	All
	Citations	403
	H-index	10

PhD Awarded

Sr. No.	Roll No.	Student Name	PhD Title	Awarded/ Submitted
1	166202	Ashima Kukkar	Bug Summarization, Severity Classification and Assignment for Automated Bug Resolution Process	21.12.2019
2	176204	Hakam Singh	Design New Meta Heuristic Algorithms for Partitional Clustering Problems	10.11.2020
3	166211	Amit Sharma	Reliable Forest Fire Detection System using Wireless Sensor Networks and IoT	12.11.2020
4	166210	Anand K. Srivastava	Design New Classifiers for Accurate Prediction of Diabetes Disease	08/02/2021

PhD Ongoing

Sr. No.	Roll No.	Student Name	PhD Title	Enrollment Date
1	186206	Raghavendra Kumar	Design New Classifier for Time Series Data Analysis using Stock Market Prediction	July, 2018
2	196202	Arvinder Kaur	Implement Single and Multi-Objective Clustering Algorithms for Data Analysis	July, 2019

Books

1. Singh, P.K., Paprzycki, M., Bhargava, B., Chhabra, J.K., Kaushal, N.C., **Kumar Yugal**, "Futuristic Trends in Network and Communication Technologies", Springer, 2019.
2. Singh, P.K., Sood, S., **Kumar Yugal**, Paprzycki, M., Pljonkin, A., Hong, W.-C. "Futuristic Trends in Network and Communication Technologies", Springer, 2020.
3. **Kumar Yugal**, Amit Jakhar and Rahul Yadav, Performance Analysis of Various Routing Protocols for Vehicular Ad-hoc Network, Scholar Press, Germany, ISBN: 978-3-639-51910-5.
4. Pradeep Kumar Singh, Gennady Veselov, Valeriy Vyatkin, Anton Pljonkin, Juan Manuel Dodero and **Kumar Yugal**, Futuristic Trends in Network and Communication Technologies, Springer, PART-I, 2021.
5. Pradeep Kumar Singh, Gennady Veselov, Anton Pljonkin, **Kumar Yugal**, Marcin Paprzycki, Yuri Zachinyaev, Futuristic Trends in Network and Communication Technologies, Springer, PART-II, 2021.
6. Kumar P., **Kumar Yugal** and Tawhid M., "Machine Learning, Big Data and IoT for Medical Informatics", published in Intelligent Data-Centric Systems: Sensor Collected Intelligence Series, Elsevier, 2021.
7. Singh P.K., Slawomir W., Kar A.K., and **Kumar Yugal**, "IoT, Big Data and AI for Improving Quality of Everyday Life: Present and Future Challenges" to be published by Springer, 2022 (**Ongoing**).

Communicated

1. Ashima Kukkar and **Kumar Yugal**. Developer Recommendation System for Bug Assignment Using Ant Colony Optimization Method. Information and Software Technology Journal, Elsevier (Submission Id: INFSOF-D-20-00106).
2. Ashima Kukkar and **Kumar Yugal**. An Ant Colony Optimization Based Feature Weighting Technique for Bug Severity Classification. International Journal of System Assurance Engineering and Management, Springer (Submission Id: IJSA-D-19-00210R1, In Revision).
3. Hakam Singh; Yugal Kumar; Neeraj Kumar; Nagesh Kumar, Revisiting Computing Paradigm for Partitional Clustering Analysis and Recommendations. New Generation Computing, Submission ID: NGCO-D-21-00339, 2021

SCI Listed Publications

1. Arvinder Kaur and **Kumar Yugal**. A multi-objective vibrating particle system algorithm for data clustering. *Pattern Analysis and Application*, Springer, DOI : 10.1007/s10044-021-01052-1 (**SCI IF 2.580**)
2. Arvinder Kaur and **Kumar Yugal**. Neighborhood Search Based Improved Bat Algorithm for Data Clustering. *Applied Intelligence Journal*, Springer DOI: 10.1007/s10489-021-02934-x (**SCI IF 5.086**)
3. Srivastava, Anand Kumar, **Yugal Kumar**, and Pradeep Kumar Singh. Hybrid diabetes disease prediction framework based on data imputation and outlier detection techniques. *Expert Systems: e12785*, 2021. (**SCI IF 2.578**)
4. Kumar, Raghavendra, Pardeep Kumar, and **Yugal Kumar**. Integrating big data driven sentiments polarity and ABC-optimized LSTM for time series forecasting. *Multimedia Tools and Applications* (2021): 1-20. (**SCI IF 2.757**)
5. **Kumar Yugal** and **Kaur Arvinder**. Variants of Bat algorithm for Solving Partitional Clustering Problems. *Engineering with Computers Journal*, Springer (Submission Id: EWCO-D-20-01022R1, Accepted) (**SCI IF 7.963**)
6. Kukkar, Ashima, Rajni Mohana, **Kumar Yugal**, Anand Nayyar, Muhammad Bilal, and Kyung S. Kwak. "A Deep Learning Technique Based Duplicate Bug Report Detection and Classification System." *IEEE Access* (2020). (**SCI IF 3.745**)
7. Sharma, Amit, Pradeep Kumar Singh, and **Kumar Yugal**. "An integrated fire detection system using IoT and image processing technique for smart cities." *Sustainable Cities and Society* 61 (2020): 102332. (**SCI IF 5.268**)
8. Kumar, Diyansh, **Kumar, Yugal**, Kumar, Arvind and Singh K. Pradeep, "Applicability of Wireless Sensor Networks in Precision Agriculture: A Review", *Wireless Personal Communication*, Volume 107 (1), pp 471–512, July 2019. (**SCI IF 1.2**)
9. **Kumar, Yugal** and Pradeep Kr. Singh, "A Chaotic Teaching Learning based Optimization Algorithm for Clustering Problems", *Applied Intelligence Journal*, Volume 49(3), pp. 1036–1062, 2019. (**SCI IF 2.882**).
10. Yadav H. B., Kumar D., Kumar S., and **Kumar Yugal**, "A Fuzzy Logic Based Approach for Decision Making", *Journal of Intelligent & Fuzzy Systems*, IOS press, vol. 35, no. 2, pp. 1531-1539, 2018. (**SCI IF 1.426**)

11. **Kumar, Yugal** and Pradeep Kr. Singh, “An Improved Cat Swarm Optimization Algorithm for Solving Global Optimization Problems and its application to clustering problems”, Applied Intelligence Journal, Springer, vol. 48, no. 9, pp. 2681–2697, 2018 (**SCI IF 1.983**)
12. **Kumar, Yugal** and Sahoo, G, “Hybridization of Magnetic Charge System Search Method for Efficient Data Clustering”, Malaysian Journal of Computer Science, 31(2), pp. 108-129, 2018. (**SCI IF 0.650**)
13. **Kumar, Yugal** and Sahoo, G., “A Two Step Artificial Bee Colony Algorithm for Clustering Problems”, Neural Computing and Applications Journal, Springer, 28(3), 537-551 2017. (**SCI IF 4.213**).
14. Gambhir, S., Malik, S.K. and **Kumar, Yugal**, “Role of Soft Computing Approaches in HealthCare Domain: A Mini Review”, Journal of Medical Systems, Springer, Vol. 40(12), pp-287-307, 2016. (**SCI IF 2.456**).
15. **Kumar, Yugal** and Sahoo, G., “Hybridization of Magnetic Charged System Search and Particle Swarm Optimization for efficient Data Clustering Using Neighborhood Search Strategy”, Soft Computing Journal, Springer, Vol. 19(12), pp-3621-3645, 2015. (**SCI-IF 1.630**).
16. **Kumar, Yugal** and Sahoo, G., “A Hybrid Data Clustering Approach based on improved Cat Swarm Optimization and K- Harmonic Mean Algorithm”, AI communications, **IOS press**, Vol. 28(4), pp-751-764, 2015. (**SCI-IF 0.466**).
17. **Kumar, Yugal** and Sahoo, AJ, “Seminal Quality Prediction using Data Mining Methods” Technology and Health Care journal, **IOS press**, Vol. 22(4), pp 331-345, 2014. (**SCI IF - 0.638**)
18. **Kumar, Yugal** and Sahoo, G.,” Prediction of different types of liver diseases using rule-based classification model’, Technology and Healthcare, Vol. 21(5), pp 417-432, 2013 (**SCI-IF 0.636**).

Scopus Listed Publications

1. Arvinder Kaur and **Kumar Yugal**, Healthcare Data Analysis Using Water Wave Optimization Based Diagnostic Model. Journal of Information and Communication Technology, 2021. (Submission Id: 11846, Accepted)
2. Kaur, Arvinder, and **Yugal Kumar**. Recent Developments in Bat Algorithm: A Mini Review. Journal of Physics: Conference Series. Vol. 1950. No. 1. IOP Publishing, 2021.
3. Kaur, Arvinder, and **Yugal Kumar**. Water Wave Optimization Based Data Clustering Model. Journal of Physics: Conference Series. Vol. 1950. No. 1. IOP Publishing, 2021.

4. Kumar, Raghavendra, Pardeep Kumar, and **Yugal Kumar**. Multi-step time series analysis and forecasting strategy using ARIMA and evolutionary algorithms. *International Journal of Information Technology* (2021): 1-15.
5. Kumar, Raghavendra, Pardeep Kumar, and **Yugal Kumar**. Hybrid time series data model to enhance forecasting accuracy of stock market trends using optimized DE-LSTM. *International Journal of Operational Research*, Inderscience, 2021. (In Press)
6. Kumar, Raghavendra, Pardeep Kumar, and **Yugal Kumar**. Two Phase Hybridization using Deep Learning and Evolutionary Algorithms for Stock Market Forecasting. *International Journal of Grid and Utility Computing*, Inderscience, 2021. (In Press)
7. Arvinder Kaur and **Kumar Yugal**. Analyzing Healthcare Data Using Water Wave Optimization Based Clustering Technique. *International Journal of Reliable and Quality E-Healthcare*, IGI Global, 10(4), 38-57, 2021.
8. Arvinder Kaur and **Kumar Yugal**. A New Metaheuristic Algorithm based on Water Wave Optimization for Data Clustering. *Evolutionary Intelligence Journal*, Springer, 2021 (Submission Id: EVIN-D-20-00575, Accepted)
9. Hakam Singh and **Kumar Yugal**. An Enhanced Version of Cat Swarm Optimization Algorithm for Cluster Analysis, *International Journal of Applied Metaheuristic*, IGI Global, Vol. 13, Issue 2, Article 8, 2020. **(Accepted)**
10. Srivastava, Anand Kumar, **Kumar Yugal**, and Pradeep Kumar Singh. Artificial Bee Colony and Deep Neural Network-Based Diagnostic Model for Improving the Prediction Accuracy of Diabetes." *International Journal of E-Health and Medical Communications (IJEHMC)*, Vol 12, Issue 2, Article 2, 2020.
11. Srivastava, Anand Kumar, **Kumar Yugal**, and Pradeep Kumar Singh. Computer aided diagnostic system based on SVM and K harmonic mean-based attribute weighting method. *Obesity Medicine*, Elsevier, 19 (2020): 100270.
12. Sharma, Urvashi, Meenakshi Sood, Emjee Puthooran, and **Kumar Yugal**. A Block-Based Arithmetic Entropy Encoding Scheme for Medical Images. *International Journal of Healthcare Information Systems and Informatics (IJHISI)* 15, no. 3 (2020): 65-81.
13. Srivastava, Anand Kumar, **Kumar Yugal**, and Pradeep Kumar Singh. A Rule-Based Monitoring System for Accurate Prediction of Diabetes. *International Journal of E-Health and Medical Communications (IJEHMC)* 11, no. 3 (2020): 32-53.

14. Singh, Hakam, and **Kumar Yugal**. A neighborhood search-based cat swarm optimization algorithm for clustering problems. *Evolutionary Intelligence*, Springer (2020): 1-17.
15. Kumar, Amit, **Kumar Yugal**, and Ashima Kukkar. A feature selection model for prediction of software defects. *International Journal of Embedded Systems, InderScience*, 13, no. 1 (2020): 28-39.
16. Kukkar, Ashima, Rajni Mohana, and **Kumar Yugal**. Does bug report summarization help in enhancing the accuracy of bug severity classification? *Procedia Computer Science* 167 (2020): 1345-1353.
17. Singh, Hakam, and **Kumar Yugal**. Hybrid Artificial Chemical Reaction Optimization Algorithm for Cluster Analysis. *Procedia Computer Science* 167 (2020): 531-540.
18. Kumar, Raghavendra, Pardeep Kumar, and **Kumar Yugal**. Time Series Data Prediction using IoT and Machine Learning Technique. *Procedia Computer Science* 167 (2020): 373-381.
19. Thakur, Divyansh, **Kumar Yugal**, and Singh Vijendra. Smart Irrigation and Intrusions Detection in Agricultural Fields Using IoT. *Procedia Computer Science* 167 (2020): 154-162.
20. Singh, Hakam, and **Kumar Yugal**. Cellular Automata Based Model for E-Healthcare Data Analysis. *International Journal of Information System Modeling and Design (IJISMD)* 10, no. 3 (2019): 1-18.
21. Singh, Hakam, **Kumar Yugal**, and Sumit Kumar. "A new meta-heuristic algorithm based on chemical reactions for partitional clustering problems." *Evolutionary Intelligence*, Springer, 12, no. 2 (2019): 241-252.
22. Kumar, Ashish, **Kumar Yugal**, Kumar PK and Kumar V., "Vibrating Particle System Algorithm for Hard Clustering Problems", *Pertanika Journal of Science and Technology*, 27 (2): 801 – 813, 2019.
23. **Kumar, Yugal**, Neeraj Dahiya, Sanjay Malik, and Savita Khatri. "A New Variant of Teaching Learning Based Optimization Algorithm for Global Optimization Problems." *Informatika* 43, no. 1 (2019).
24. Gambhir, Shalini, Sanjay Kumar Malik, and **Kumar Yugal**. "The diagnosis of dengue disease: An evaluation of three machine learning approaches." *International Journal of Healthcare Information Systems and Informatics (IJHISI)* 13, no. 3 (2018): 1-19.

25. Srivastava, Abhishek, Yashi Mathur, Rana Majumdar, Ritu Gupta, and **Kumar Yugal**. "Comparing IaaS providers present in the market: using hybrid intuitionistic fuzzy technique combined with TOPSIS." *International Journal of Pure and Applied Mathematics* 119, no. 15 (2018): 2771-2782.
26. Yadav, Geeta, Piyush Kumar, **Kumar Yugal**, and Pradeep Kumar Singh. "Dolutegravir, Second Generation Integrase Inhibitor: A New Hope for HIV Patient." *European Journal of Molecular & Clinical Medicine* 5, no. 1 (2018).
27. Thakur, Divyansh, **Kumar Yugal**, Arvind Kumar, Pradeep Kumar, and Vijendra Singh. Real time monitoring of Valeriana Jatamansi plant for growth analysis. *Procedia computer science* 132 (2018): 507-517.
28. **Kumar Yugal** et al., Watermarking on Encrypted Images with 3 Level DWT, *International Journal of Pure and Applied Mathematics*, Vol. 119, No. 15, pp. 2753-2762, 2018.
29. **Kumar Yugal** et al., Study of Preference Based Page Ranking Algorithm, *International Journal of Pure and Applied Mathematics*, Vol. 119, No. 15, pp. 2763-2770, 2018.
30. Gambhir, S., Malik, S.K. and **Kumar, Yugal**, "PSO-ANN based Diagnostic Model for Earlier Detection of Dengue Disease", *New Horizons in Translational Medicine*, Elsevier, 4, pp. 1-8 2017.
31. **Kumar, Yugal** and Sahoo, G., "Improved Cat Swarm Optimization Algorithm based on Opposition based learning and Cauchy Operator for Clustering", *Journal of Information Processing Systems*, 13(4): pp. 1000-1013, 2017.
32. **Kumar, Yugal** and Sahoo, G., "Gaussian Cat Swarm Optimization Algorithm based on Monte Carlo method for Data Clustering", *International Journal of Computational Science and Engineering*, InderScience, Vol. 14, No. 2, pp. 198-210, 2017.
33. Dalal, Surjeet, Dahiya, Neeraj, Khatri, Savita and **Kumar, Yugal**, "Cat swarm optimization: applications and experimental illustrations to data clustering, *International Journal of Control Theory and Applications*, Vol. 9 (41), pp. 759-765, 2016.
34. Kumar Pardeep, **Kumar Yugal** and Sangwan OP, "Empirical Evaluation of Aspect Oriented Software Quality Model Using Multi-Criteria Decision Making Based AHP Approach", *International Journal of Control Theory and Applications*, Vol. 9(45), pp. 159-166, 2016.
35. **Kumar, Yugal** and Sahoo, G., "A Hybridize Approach for Data Clustering Based on Cat Swarm Optimization", *International Journal of Information and Communication Technology*, InderScience, Vol. 9(1), pp-117-141, 2016.

36. **Kumar, Yugal**, Gupta, S. and Sahoo, G., "A Clustering Approach Based on Charged Particles", International Journal of Software Engineering and Its Applications, Vol. 10(3), pp-9-28, 2016.
37. **Kumar, Yugal** and Sahoo, G., "A charged system search approach for data clustering", Progress in Artificial Intelligence, Springer, Vol. 2(2-3), pp- 153-166, 2014.
38. **Kumar, Yugal** and Sahoo, AJ, "A Modified TLBO Method for Data Clustering", Advances in Intelligent Systems and Computing (Springer) Volume 264, pp- 429-437, 2014.
39. **Kumar, Yugal** and Sahoo, G., "A chaotic charged system search approach for data clustering", Informatica, Vol. 38(3), pp.249-261, 2014.
40. **Kumar, Yugal**, and Sahoo G, "An Initialization Method for K-Means Algorithm Using Binary Search Technique." International Journal of Soft Computing, Vol. 9(3), pp.131-137, 2014.
41. Yadav Geeta, **Kumar Yugal**, Sahoo G, "Predication of Parkinson's disease using data mining methods: a comparative analysis of tree, statistical, and support vector machine classifiers" Indian Journal of Medical Science, Vol. 65(6), pp.231-42, 2011.

Peer Reviewed Publication List

1. **Kumar, Yugal** and Sahoo, G., "A Review on Gravitational Search algorithm and its applications to data clustering & classification", International Journal of Intelligent System and applications, Vol. 6, No. 6, pp- 79-93, 2014.
2. **Kumar, Yugal**, and G. Sahoo. "A Hybrid Data Clustering Approach Based on Cat Swarm Optimization and K-Harmonic Mean Algorithm." Journal of Information and Computing Science, Vol. 9, No. 3, pp. 196-209, 2014.
3. **Kumar, Yugal**, and G. Sahoo, "A New Initialization Method to Originate Initial Cluster Centers for K-Means Algorithm" International Journal of Advanced Science and Technology Vol. 62, pp- 43-54, 2014.
4. **Kumar, Yugal** and Sahoo, G., "Study of Parametric Performance Evaluation of Machine Learning and Statistical Classifiers." International Journal of Information Technology and Computer Science, Vol. 5, No. 6, pp- 57- 64, 2013.
5. **Kumar, Yugal** and Sahoo, G., "Analysis of Parametric & Non-Parametric Classifiers for Classification Technique using WEKA." International Journal of Information Technology and Computer Science, Vol. 4, No. 7, pp- 43- 49, 2012.

6. Rana, R.S, **Kumar Yugal** and Kumar Dharmander, "Method and Technique of Digitized Land Record Verification using Android Application" IJCST, Vol. 3, No. 1, pp- 50-51, 2012,
7. **Kumar, Yugal** and Kumar D., "Analysis of classification algorithms/Technique in Data Mining using Weka", International journal of science engineering and technology, Vol. 2, No. 1, pp- 1-4, 2012.
8. Yadav, Geeta, **Kumar, Yugal**, and G. Sahoo, "Role of the Computational Intelligence in Drugs Discovery and Design: Introduction, Techniques and Software", International Journal of Computer Applications Vol. 51, No. 10, pp- 7-18, 2012.
9. **Kumar, Yugal**, and Kumar, D., "Parametric Analysis of Nature Inspired Optimization Techniques." International Journal of Computer Applications, Vol. 32, No. 3, pp- 42-49, 2011.
10. **Kumar, Yugal**, Kumar, P., and Kadian, A., "A survey on routing mechanism and techniques in vehicle-to-vehicle communication (VANET)", International Journal of Computer Science & Engineering Survey, Vol. 2, No. 1, pp- 135-144, 2011.
11. **Kumar, Yugal**, Yadav, S., and Yadav, R., "Fuzzy Set in Business Process Management as Reference Model", Global Journal of Computer Science and Technology Vol. 10, No. 7, pp- 24-27, 2010.

Book Chapter

1. Singh, Hakam, and **Kumar Yugal**. "Hybrid Big Bang-Big Crunch Algorithm for Cluster Analysis." In International Conference on Futuristic Trends in Networks and Computing Technologies, pp. 648-661. Springer, Singapore, 2019.
2. **Kumar, Yugal**, Geeta Yadav, Pradeep Kumar Singh, and Punkhari Arora. "A PHR-based system for monitoring diabetes in mobile environment." In Mobile Solutions and Their Usefulness in Everyday Life, pp. 129-144. Springer, Cham, 2019.
3. **Kumar, Yugal**, Neeraj Dahiya, Sanjay Malik, Geeta Yadav, and Vijendra Singh. "Chemical Reaction-Based Optimization Algorithm for Solving Clustering Problems." In Natural Computing for Unsupervised Learning, pp. 147-162. Springer, Cham, 2019.
4. Gambhir, Shalini, **Yugal Kumar**, Sanjay Malik, Geeta Yadav, and Amita Malik. "Early Diagnostics Model for Dengue Disease Using Decision Tree-Based Approaches." In Pre-Screening Systems for Early Disease Prediction, Detection, and Prevention, pp. 69-87. IGI Global, 2019.

Conference Publication

International Conferences

1. Kaur, Arvinder, and **Yugal Kumar**. Recent Developments in Bat Algorithm: A Mini Review, In 1st International Conference on Mechatronics and Artificial Intelligence, February 26th – 27th, 2021, SGT UNIVERSITY, GURGAON.
2. Kaur, Arvinder, and **Yugal Kumar**. Water Wave Optimization Based Data Clustering Model, In 1st International Conference on Mechatronics and Artificial Intelligence, February 26th – 27th, 2021, SGT UNIVERSITY, GURGAON.
3. Kumar, R., Kumar, P., & **Kumar, Y.** (2020). Time series data prediction using IOT and machine learning technique. *Procedia computer science*, International Conference on Computational Intelligence and Data Science 167, 373-381.
4. Kumar, R., Kumar, P., & **Kumar, Y.** (2021, January). Analysis of Financial Time Series Forecasting using Deep Learning Model. In 2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence) (pp. 877-881). IEEE.
5. Muchtar, Farkhana, Pradeep Kumar Singh, **Yugal Kumar**, Asma Hanee Ariffin, Suzi Iryanti Fadilah, and Mohd Najwadi Yusoff. "ToMRobot: A Low-Cost Robot for MANET Testbed." In 2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), pp. 54-59. IEEE, 2018.
6. Srivastava, Anand Kumar, Pradeep Kumar Singh, and **Yugal Kumar**. "A Taxonomy on Machine Learning Based Techniques to Identify the Heart Disease." In International Conference on Next Generation Computing Technologies, pp. 13-25. Springer, Singapore, 2018.
7. Muchtar, Farkhana, Abdul Hanan Abdullah, Siti Nor Zawani Ahmmad, and **Yugal Kumar**. "Mobility in MANET Using Robot: A Review." In International Conference on Futuristic Trends in Network and Communication Technologies, pp. 304-324. Springer, Singapore, 2018.
8. Singh, Pradeep Kumar, Sankalp Jain, Akshat Mathur, and **Yugal Kumar**. "An analysis on the potentials of Vertical Greenery System (VGS) in context to the application viewpoint." In 2017 4th International Conference on Signal Processing, Computing and Control (ISPCC), pp. 632-636. IEEE, 2017.
9. Singh, Pradeep Kumar, Sheely Garg, Mandeep Kaur, Manpreet Singh Bajwa, and **Yugal Kumar**. "Fault localization in software testing using soft computing approaches." In 2017 4th International Conference on Signal Processing, Computing and Control (ISPCC), pp. 627-631. IEEE, 2017.

10. Dalal, S., Dahiya, N., **Kumar, Y.** and Khatri, S., Cat swarm optimization: applications and experimental illustrations to data clustering, 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM 2017) will be held Jain College of Engineering, Belgaum,, Goa, India. (Scopus)
11. **Kumar, Yugal** and Sahoo, G. “An Improved Cat Swarm Optimization Algorithm for Clustering”, In international Conference on Computational Intelligence in Data Mining (ICCIDM-2014) on 20th- 21st Dec. 2014 at Veer SurendraSai University of Technology (VSSUT), Burla, Sambalpur, Odisha and proceedings published in the Springer's Series on Smart Innovation, Systems and Technologies, Germany, 2014 (Scopus).
12. **Yugal Kumar** and G. Sahoo, “Analysis of Bayes, Neural Network and Tree Classifier of Classification Technique in Data Mining using WEKA” published in the Second International Conference on Computer Science, Engineering and Applications (CCSEA-2012), May 26 ~ 27, 2012, Delhi, India, Proceedings, volume Editors: David C. Wyld et al. (Eds): CCSEA, SEA, CLOUD, DKMP, CS & IT 05, pp. 359–369, 2012. ISBN: 978-1-921987-03-8, DOI: 10.5121/csit.2012.2236.
13. **Yugal Kumar**, Ravi Sing Rana and Samit Yadav “A Comparative Study of Various Algorithms and Performance in Vehicular Ad-hoc Network” published in the proceeding of the International Conference held at PDM College of Engg. on 18-19th June 2009.
14. Ravi Sing Rana, **Yugal Kumar** and Samit Yadav “Increases the performance of MANET using gateways” published in the proceeding of the International Conference held at PDM College of Engineering on 18-19th June 2009.
15. **Yugal Kumar**, Akash Kadian and Rajeev Yadav “A Survey on Autonomic Computing Definition, Concept and Architect” published in the proceeding of the International Conference on Computing (ICC 2010) organized by the Advanced Computing Research Society held at Institute for Defense Studies and Analysis, New Delhi on 27-28th Dec.2010, ISBN – 978-81-920305-1-7.

National Conference

16. **Yugal Kumar** and Samit Yadav, “Autonomic Computing” in National Level Conference held at BRCM College of Engineering and Technology, Bahal on 24-25th March 2008.
17. **Yugal Kumar** and Samit Yadav “A Survey on VANET” in National Level Conference held at Guru Jambheshwar University, Hissar on 24-25th March 2009.
18. **Yugal Kumar** and Samit Yadav “Vehicular Ad-hoc Network (VANET) - Challenges, Issues and Security” in National Level Conference held at Guru Jambheshwar University, Hisar on 24-25th March 2009.

19. **Yugal Kumar** and Pradeep Bharti “Routing Mechanism in Vehicle to Vehicle Communication (VANET)” for a National level conference held at GITM, Bilaspur on 20th March 2010 (NCEDCT).
20. Yadav, G., **Yugal Kumar**, & Sahoo, G. (2012, November). Predication of Parkinson's disease using data mining methods: A comparative analysis of tree, statistical and support vector machine classifiers. In IEEE National Conference on Computing and Communication Systems (NCCCS), pp. 1-8, 2012.

Conference Organized

1. **Convener** of One Week Faculty Development Program titled “Computational Intelligence Techniques for Machine Learning” conducted by Department of Computer Science and Engineering, Jaypee University of Information Technology (JUIT) during August 31st to September 4th, 2020.
2. Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), Dept. of CSE & IT, Jaypee University of Information Technology as **Conference Co-Chair** held on 20-22 December, 2018,
3. First International Conference on Futuristic Trends in Network and Communication Technologies (FTNCT-2018), Department of Computer Science and Engineering, Jaypee University of Information Technology (JUIT) as **Conference Co-Chair** held on Feb. 9-10, 2018.
4. Second International Conference on Futuristic Trends in Network and Communication Technologies (FTNCT-2019) Jointly organized by Department of Computer Science and Engineering, Jaypee University of Information Technology (JUIT) and CDAC, Mohali as **Conference Co-Chair** held on November 22-23, 2019.
5. Served as **Chair of Organizing Committee** in Fifth International Conference on Image Information Processing (ICIIP-2019) organized by the Department of Computer Science and Information Technology, JUIT, Wagnaghat, during November, 15-17, 2019.
6. Served as **Chair of Organizing Committee** in Fourth International Conference on Image Information Processing (ICIIP-2017) organized by the Department of Computer Science and Information Technology, JUIT, Wagnaghat, during December, 21-23, 2017.
7. **Co-Convener** of Workshop on “Massive Open online Courses (MOOCS)” held on September 15, 2017.

Serve as Session Chair

1. **Chaired the Session** in the Second International Conference on Computing, Communication and Cyber-Security (IC4S-2020), held at Krishna Engineering, College, Ghaziabad, U.P. India, during October 3-4, 2020.
2. **Chaired the Session** in the Second International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2019) jointly organized by the Department of Computer Science and Information Technology, JUIT, Waknaghat and CDAC Mohali, during November, 22-23, 2019.
3. **Chaired the Session** in the International Conference on Signal Processing, Computing and Control (ISPPC-2019) organized by the Department of Electronics and Communication Engineering, JUIT, Waknaghat, during October, 10-12, 2019.
4. **Chaired the Session** in Fifth International Conference on Image Information Processing (ICIIP-2019) organized by the Department of Computer Science and Information Technology, JUIT, Waknaghat, during November, 15-17, 2019.
5. **Chaired the Session** in the First International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT-2018) organized by the Department of Computer Science and Information Technology, JUIT, Waknaghat, during February, 9-10, 2019.
6. **Chaired the Session** in the Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC-2018) organized by the Department of Computer Science and Information Technology, JUIT, Waknaghat, during December, 20-22, 2018.
7. **Chaired the Session** in the Wireless Intelligent and Distributed Environment for Communication (WIDECOM-2018) organized by the Department of Computer Science and Engineering, SRM University Delhi NCR, during February, 16-18, 2018.
8. **Chaired the Session** in the International Conference on Computational Intelligence and Data Science (ICCIDS-2018) organized by the Department of Computer Science and Engineering, The NorthCap University, during April 7-8, 2018.
9. **Chaired the Session** in Second International Conference on Conscientious and Unimpeachable Technologies (ICCUT-2017) organized by the Department of Computer Science and Information Technology, St. Andrew Institute of Technology and Management, Gurugram, during October, 14th, 2017.

10. **Chaired the Session** in the International Conference on Signal Processing, Computing and Control (ISPCC-2017) organized by the Department of Electronics and Communication Engineering, JUIT, Wagnaghat, during September, 21-23, 2017.

Invited Talk

1. An Invited Talk on titled “**Meta-Heuristic Techniques for Data Analysis**” in one-week Faculty Development Program on Computational Intelligence Techniques for Machine Learning conducted by Department of Computer Science and Engineering, JUIT, Wagnaghat, during August 31st-September 4th, 2020.
2. An Invited Talk on titled “**Finding Structures in Data**” in two-week Faculty Development Program on Data Science and Big Data Analytics conducted by Department of Civil Engineering, Poornima University, Jaipur, Rajasthan during July 08-18, 2019.
3. An Invited Talk on research topic “**Analytic Techniques for Image Data**” in short term course on Recent Advance in Signal and Image Processing (RASIP-2019) Department of Electronics and Communication Engineering, JUIT, Wagnaghat, during June, 24-28, 2019.
4. A Keynote Talk on titled “**AI based Algorithm and its Applications**” in Second International Conference on Conscientious and Unimpeachable Technologies (ICCUT-2017) organized by the Department of Computer Science and Information Technology, St. Andrew Institute of Technology and Management, Gurugram, during October, 14th, 2017.

FDP/STP

1. Participated in AICTE organized Short Term Course on “**Cloud Computing through ICT**” conducted by Department of Computer Science and Engineering, JUIT, Wagnaghat, during October 23-27, 2017.
2. Participated in AICTE organized Short Term Course on “**Wireless and Mobile Communication through ICT**” conducted by Department of Electronics and Communication Engineering, JUIT, Wagnaghat, during October 23-27, 2017.
3. Participated in “**Virtual Labs Cloud Edition Workshop IIIT-Hyderabad**” conducted by Department of Computer Science and Engineering, JUIT, Wagnaghat, during May 9-12, 2017.
4. Participated in one day workshop on “**Patent Drafting**” conducted by JUIT, Wagnaghat, during October 13, 2017.

5. Participated in Faculty Development Program on “**Emerging Trends in VLSI and Communication**” conducted by Department of Electronics and Communication Engineering, JUIT, Waknaghat, during June, 9-18, 2018.
6. Participated in Faculty Development Program on “**Recent Trends on Machine Learning for Signal Processing**” conducted by Department of Electronics and Communication Engineering, JUIT, Waknaghat, during May, 20-25, 2019.
7. Attend the workshop on “Text Mining” held at Indian Statistical Institute, Kolkata on 6th – 8th January, 2014.
8. One week National workshop on “Challenges in Big Data Research” organized by department of Computer Science, Malaviya National Institute of Technology, Jaipur on 9th – 13th November 2013.
9. Attend one week short term training program on “Applications of artificial intelligence techniques in engineering and research” held at Birla Institute of Technology, Mesra, Ranchi and Jharkhand on 23rd - 27th September 2013.
10. Workshop cum training program on “Basic Mat lab course” held at Birla Institute of Technology, Mesra, Ranchi and Jharkhand on 24th - 1st July 2013.
11. Attend National seminar on “Cyber Threats: Issues and Challenges” held at ITS Engineering College, Greater Noida, Uttar Pradesh on 2nd April 2011.
12. Workshop on “Intelligent Systems and Wireless Networks (ISWN-2010)” held at Bharat Institute of Technology, Sonapat on 20th - 24th Dec. 2010.
13. Staff Development Program on “Smart Materials” held at SD Institute of Technology and Management, Balana, Panipat on 19th - 31st July 2010.
14. Workshop on “Recent in Software Engg.” held at PDM College of Engg., Sarai Aurangabad, Bhadurgarh on 30th March, 2010
15. Workshop on “Recent Trends in Mathematics & Computing” held at The Technological Institute of Textiles & Sciences, Bhiwani on 13th March, 2010.
16. Workshop on “Nanotechnology” held at DAV College of Engineering and Technology – Jalandhar, Punjab from 27th - 28th Feb. 2010
17. Workshop on “Building Skills Set With 21st Century Networking Devices” held at Amity University, Noida on 4th April 2008.

Membership of Professional Bodies

Organization Name	Membership ID	Duration
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International Association of Engineers (IAENG)	109033	Life Time
Internet Society (ISOC)	285196	Life Time
Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (ICST)		5 years
Association for Computing Machinery (ACM)(Computer Science Teacher Association CSTA)	521001	Life Time
IACSIT (International Association of Computer Science & Information Technology)	80341708	Life Time
UACEE (Universal Association of Computer and Electronics Engineers)	A7800738	Life Time

Work Experience

- Working as Assistant Professor in department of Information Technology, KIET Group of Institutions, Ghaziabad, Uttar Pradesh from 4th August, 2015 to 29th April 2017.
- Worked as Assistant Professor, Department of Computer Science & Engineering, in Hindu College of Engineering, Sonipat from 3rd August, 2010 to 22nd September 2012.
- Worked as Lecturer, Department of Computer Science & Engineering, in Panipat Institute of Engg and Technology, Samalkha, Panipat w.e.f. 10th August 2009 to 2nd August 2010.
- Worked as Lecturer, Department of Computer Science & Engineering, DAV College of Engineering and Technology, Kanina, Haryana w.e.f. 26th July 2006 to 6th August 2007.

Personal Details

Name : Yugal Kumar
 Father Name : Sh. OmparkashYadav
 Mother Name : Smt. Sunita Devi
 Spouse Name : Dr. GeetaYadav (Ph.D. in Pharmaceutical Chemistry)
 Date of Birth : 14th Sep. 1984
 Nationality : Indian
 Marital Status : Married

(YUGAL KUMAR)

Date: 07 /01/2021

Place: JUIT