## Research Publications and Conferences

## **Journal Publications**

- 1. Devendra K. Tayal & Sumit K. Yadav, "Sentimental Analysis on Social Campaign Swacch Bharat Abhiyan using Unigram Method", Published online, 13th August 2016, INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE & SOCIETY, Springer Verlag Publications, London. DOI: 10.1007/S00146-016-0672-5.
- 2. Anupama Kaushik, D.K. Tayal, Kalpana Yadav and A. Kaur, "Integrating Firefly Algorithm in Artificial Neural Netword Models for Accurate Software Cost Predictions", INTERNATIONAL JOURNAL OF SOFTWARE EVOLUTION AND PROCESS, Vol. 28, Issue 8, August, 2016, John Wiley & Sons Publications, 2016, SCIE Indexed, Impact Factor, 0.7
- 3. Sumit Yadav ,D K Tayal & S.N.Shivhare, "Perplexed Bayes Classifier based Secure & Intelligent Approach for Aspect Level Sentimental Analysis", Accepted for Publication in INTERNATIONAL JOURNAL OF INTERNATIONAL JOURNAL OF ADVANCED INTELLIGENCE PARADIGMS, Inderscience publications.
- 4. D K Tayal & P C Saxena, "Multivalued Dependencies in Fuzzy Multivalued Databases using fuzzy functions", INTERNATIONAL JOURNAL OF UNCERTAINTY, FUZZINESS & KNOWLEDGE BASED SYSTEMS, Vol 23 No. 4, August 2015, World Scientific Publications, SCI Expanded Indexed, Impact Factor: 1.39
- 5. A. Jain, D.K.Tayal, Sunny Rai, "Shrinking Digital Gap through Automatic Generation and Updation of WordNet for Indian Languages", Vol. 30 No. 2, 2015, INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE & SOCIETY, Vol. 30, Issue 2, May 2015, Springer Verlag Publications, London.
- 6. A. Jain, D. K. Tayal, Sudesh Yadav, "Retrieving Web Search Results Using Max-Max Soft Clustering for Hindi Query", Accepted for publication in International Journal of System Assurance Engineering & Management, Springer, Netherlands, Volume 7, pp 70-81, December 2016.
- 7. D. K.. Tayal, & S.K. Yadav, Fast retrieval approach of sentimental analysis with implementation of bloom filter on Hadoop. International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT) (pp. 14-18), March, 2016, Delhi. (Available at www.ieeexplore.ieee.org).
- 8. D.K.Tayal, Shreya Chhabra and Leena Ahuja, "Word Sense Disambiguation in Hindi Language Using Hyperspace Analogue to Language and Fuzzy C-Means Clustering", 12th International Conference on Natural Language Processing(ICON-2015), 11th -14th December, 2015.
- 9. D.K. Tayal & Sumit Yadav, "Word Level Sentiment Analysis Using Fuzzy Sets", International Conference on Advances in Computer Science and Information Technology", Pattaya, Thailand,

March 28-29, 2015 (Also appeared in International Journal of Advances in Sciences & Technology).

- 10. D. K. Tayal, A. Jain, Surbhi Arora, Surbhi Agarwal, Tushar Gupta, Nikhil Tyagi, "Crime Detection and Criminal Identification in India using Data Mining Techniques", INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE & SOCIETY, Vol. 30 Issue 1, February, 2015, Springer Verlag, London.
- 11. A Jain, D K Tayal, Kanika Mittal, "Automatically Incorporating Context meaning in Query Expansion using Graph Connectivity measures", INTERNATIONAL JOURNAL OF PROGRESS IN ARTIFICIAL INTELLIGENCE, Springer Verlag, Germany, Vol 2, 2-3, 2014.
- 12. D K Tayal, P C Saxena, Ankita Sharma, Garima Khanna & Shubangi Gupta, "A New Method for solving Reviewer Assignment Problem Using Type-2 Fuzzy Sets and Fuzzy Functions", INTERNATIONAL JOURNAL OF APPLIED INTELLIGENCE, Springer, New York, Vol. 38, Issue 4, May 2013, SCIE Indexed, Impact Factor: 1.94 (News article also appeared in Sunday Hindustan Times dated 19th May, 2013 about this research)
- 13. D K Tayal, A Jain, Divya Gupta, Garvita Saini, "A new method to predict Box Office Collections for Bollywood movies using online opinion mining", Accepted for publication in INTERNATIONAL JOURNAL OF ENGINEERING INTELLIGENT SYSTEMS, United Kingdom, Impact Factor: 0.33, September, 2015.
- 14. D K Tayal, A Jain, Shuchi Gupta, Neha Dimri, "Metasurfer- A new Metasearch Engine based on FAHP and modified EOWA operator", INTERNATIONAL JOURNAL OF SYSTEM ASSURANCE ENGINEERING & MANAGEMENT, Springer, Netherlands, Vol 6.4 (2015): 487-499.
- 15. D.K.Tayal & P.C.Saxena "Normalisation in type-2 fuzzy relational Data Model Based on Fuzzy Functional Dependency using Fuzzy Functions.", INTERNATIONAL JOURNAL OF UNCERTAINITY, FUZZINESS & KNOWLEDGE BASED SYSTEMS, World Scientific Publications, Vol 20. No. 1, February, 2012, SCI Expanded Indexed, Impact Factor—1.39.
- 16. D.K.Tayal & Deepa Bura, "An Efficient Approach for Identifying Functional Dependencies in a Database Class", IUP JOURNAL OF INFORMATION TECHNOLOGY, Vol 8(1), March ,2012
- 17. D.K.Tayal, Charu Gupta, Kapil Sharma, "Forecasting University Enrolments using an Improved method of automatic clustering, fuzzy logical relationships and differential evolution", INTERNATIONAL JOURNAL OF COMPUTATIONAL SYSTEMS ENGINEERING, Inderscience Publications, submitted for publication, currently under review.
- 18. J.P.Gupta, D K Tayal & A. Jain "A TENGRAM method based on Part-of- speech Tagging of multi-category words in Hindi Language INTERNATIONAL JOURNAL OF EXPERT SYSTEM WITH APPLICATIONS, Elsevier Science Publications, Science Direct, Vol. 38, December 2011, p.p

15084-15093, SCI Indexed, Impact Factor: 2.339

- 19. D.K.Tayal & Satya Komaragiri, "Comparative Analysis of the Impact of Blogging and Microblogging on Market Performance", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE & ENGG., Vol. I, Issue -03, 2009.
- 20. D.K.Tayal, Neha Gupta & Paneha Bhasin, "A Fuzzy Analytical Hierarchical Process Based Career Decision Making For B.Tech Admissions In Delhi Region", IUP JOURNAL OF INFORMATION TECHNOLOGY, Vol. 5, Issue 4, December 2009.
- 21. D.K.Tayal & Vinita Gupta, "Fuzzy Expert System for Noise Induced Sleep Disturbance and Health Effects, Vol. I, Issue 3, 2009 BVICAM INTERNATIONAL JOURNAL OF INFORMATION TECHNOLOGY.
- 22. D.K.Tayal, Vinita Mittal, A Jain, "On reverse engineering an object-oriented code into UML class diagrams incorporating extensible mechanisms", ACM SIGSOFT SEN, Volume 33, No. 5, September 2008.
- 23. D.K.Tayal & P.C.Saxena, "Fuzzy Join dependency in Fuzzy Relational Databases", INTERNATIONAL JOURNAL OF INTELLIGENT TECHNOLOGY, WASET, France, Vol. 2 (No.1), April 2007.
- 24. D K Tayal & P.C.Saxena, "Fuzzy equi–join operator in type-1 & type-2 fuzzy-relational databases" INTERNATIONAL JOURNAL OF COMPUTING, MULTIMEDIA & INTELLIGENT TECHNIQUES, Poland, Vol. 3, April 2007.
- 25. B.K. Tyagi, R.N.Dutta, Shafruddin, D.K. Tayal, "A complete axiomatization of fuzzy functional dependencies using fuzzy function", INTERNATIONAL JOURNAL OF FUZZY SETS AND SYSTEMS, Elsevier Science Publication, Science Direct, Vol. 151(No 2), April 2005, SCI Indexed, Impact Factor: 2.218.

## **Conferences (2014 & Earlier)**

- 1. D.K.Tayal, Sumit Yadav, Komal Gupta, Bhawna Rajput, Kiran Kumari, "Polarity Detection of Sarcastic Political Tweets", INDIACom-2014; 2014 International Conference on "Computing for Sustainable Global Development", technically sponsored by IEEE, March 2014, Delhi. (Available at www.ieeexplore.ieee.org).
- 2. A. Jain, Sudesh Kumari Yadav, D K Tayal, "Measuring Context-Meaning for Open Class Words in Hindi Language", In Proceedings of International Conference on 6th International Conference on Contemporary Computing, 8-10th August, 2013.(Indexed in: SCOPUS, DBLP and available at www.ieeexplore.ieee.org)

- 3. D.K. Tayal & A.Jain, "Named Entity Recognition for Hindi Language Using Association Rules", International Conference on Data Mining & Intelligent Computing, September 4-5, 2014, Delhi, India(Co Sponsored by IEEE). (Available at www.ieeexplore.ieee.org).
- 4. D.K.Tayal, Shuchi Gupta, Neha Dimri, "Evolution Of Ordered Weighted Averaging Operators And Their Role In Solving MCDM And GDM Problems", International Conference on Artificial Intelligence and Soft Computing 2012 (co -sponsored by IEEE, UP Chapter) held from 7-9th December, 2012 at IIT-BHU.(Available at www.ieeexplore.ieee.org)
- 5. D. K. Tayal, Smita Sabharwal, A Jain, Kanika Mittal, "Intelligent Query Expansion for the Queries including Numerical Terms", In Proceedings: National Conference on Communication Technologies & its impact on Next Generation Computing CTNGC 2012, Proceedings published by INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS® (IJCA), USA.
- 6. D. K.Tayal & Charu Gupta, "A new Scale Factor for Differential Evolution Optimization", In Proceedings: National Conference on Communication Technologies & its impact on Next Generation Computing CTNGC 2012, Proceedings published by INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS® (IJCA), USA.
- 7. D.K.Tayal, Charu Gupta, A Jain, "A new Crossover Operator for Differential Evolution in Numerical Optimization", International Conference on Communication, Information & Computing Technology (ICCICT), Oct. 19-20,2012 Mumbai, India. (Available at www.ieeexplore.ieee.org).