Dr. Pushpalata Pujari Assistant Professor Dept of Computer Science and Information Technology (CSIT), GGV, Central University, Bilaspur, (C.G) E-Mali - <u>pujari.lata@rediffmail.com</u> Contact: 9425262192

### **Educational Qualifications:**

i. B.Sc. (Physics(hons), Chemistry and Mathematics) – Berhampur University, Berhampur, Orissa.
ii. M.C.A. – Berhampur University, Berhampur, Odisha.
iii. Ph.D – Guru Ghasidas Vishwavidyalaya, Bilaspur, C.G

Other Academic Achievement: (1999) UGC-NET qualified in Computer Science & Application.

Teaching Experience: Working as an Assistant Professor in CSIT department since September 2005.

**<u>Research Area:</u>** Character recognition, Soft Computing and Evolutionary computing

### **Research Publication**

- 1. (2005-06) " Role of Communication Technology in Rural Development", National Conference on Cyber Security, Data Mining and ICT for the Society, 18-19 Jan, 2006, Organized by Department of CSIT, GGV, Bilaspur, C.G.
- (2005-06) Participated in the five day workshop on 'Gender Equity Through Entrepreneurship Development during 16 th May – 20<sup>th</sup> May 2006, Organized by Women Studies and Development Centre, GGV & Ministry of small scale industries, Govt of India.
- 3. <u>(2006-07)</u>"Applications of Association Rule and Fuzzy Set Approach to Population and literacy Data for finding relationship classification and prediction.", National Conference on Data Mining and E-Governance, Organized by Department of CSIT, GGV, Bilaspur, 17<sup>th</sup> February, 2007 (Presented).
- <u>(2007-08)</u> "Adaptive Neuro Fuzzy System (ANFIS) based sliding mode controller Design for Controlling the Structure Vibration", Tenth Conference on International Academy of Physical Science CONIAPS-X), International conference, January 12-14, 2008. (Presented)

- 5. (2010-11)"A comparative study of Decision tree based data mining algorithm and its ensemble method for classification of data", Proceeding of international conference on Emerging trends in soft computing and ICT (SCICT-2011) ,(pp:41-44),Organized by Dept of CSIT,GGV ,Bilaspur, India on 16-17 March 2011, ISBN: 978-81-920913-3-4.(Full Paper in Conference Proceedings & Presented)
- 6. (2011-12) "Environmental knowledge based system for Framing Policies ", National seminar on "Emerging techniques in computer science", on 22-23 November, 2011 ,Organized by Kalyan P.G College, Bhilai Nagar(C.G)(Presented)
- 7. (2011-12) "Prediction of political party from US house of representative votes by using different data mining algorithm", National seminar on "Emerging techniques in computer science", on 22-23 November, 2011, Organized by Kalyan P.G College, Bhilai Nagar(C.G)(Presented)
- 8. (2011-12) "Feature Selection & Performance analysis of logistic regression, SVM, and Neural network classifiers" National seminar on "Green technology in Computer science & Engineering and IT, on 20-21 January, 2012 ,Organized by CSIT, Durg (C.G)(Presented)
- 9. (2011-12) "Data Mining Techniques for Environmental Issues", National seminar on 20-21 January, 2012"Green technology in Computer science & Engineering and IT, Organized by CSIT, Durg (C.G)(Presented)
- <u>(2011-12)</u> "Fusion of Vocational Education & E-learning to develop Technical Skills" National seminar on "Role of Universities in skill development and vocational Education" on 10-11 February, 2012, Organized by C.V.Raman University, Bilaspur (C.G)(Presented)
- (2011-12) "Analysis to need for technical vocational education (TVE) using ICT: The nations education initiatives for Indian educations and employers perspectives." National seminar on "Role of Universities in skill development and vocational Education" on 10-11 February, 2012, Organized by C.V.Raman University, Bilaspur (C.G)(Presented)
- (2011-12) "Information Communication Technology and Skill development in educational sector "National seminar on "Role of Universities in skill development and vocational Education", on 10-11 February,2012, Organized by C.V.Raman University, Bilaspur (C.G)(Invited Talk)
- (2011-12) "Exploiting Data Mining Techniques for Improving the Efficiency of Time Series Data Using SPSS Clementine", International Journal of Arts Science and commerce, ISSN: 2229-4686, Print ISSN: 2231-4172, Vol. – III, Issue 2(3), (PP: 69-80), April. 2012
- (2011-12) "Neural network, support vector machine and its ensemble model for prediction of different categories of dermatology data set", Proceedings of Academy of Information and Management Sciences, Volume 16, Number 1, Allied Academies International Conference

New Orleans, Louisiana,4-6 April 2012, Volume 16, Number 1, ISSN 1948-3171. (Full Paper in Conference proceeding).

- 15. (2011-12) "An Ensemble model of Multiple classifiers with Feature selection for Classification of data", National seminar on "Innovative Trends in management, Science & technology, on 8 April 2012 Organized by Central College of Engineering and Management& technology Raipur (C.G)(Presented)
- (2011-12) "Improving Classification Accuracy by using Feature Selection and Ensemble Model", International Journal of soft computing and engineering, ISSN: 2231-2307, Impact factor-0.52, Volume-2, Issue-2, (pp: 380-386), May 2012.
- (2011-12) "Classification and comparative study of different data mining Classifier with feature selection on binomial data set", International Journal of global Research in computer Science, ISSN: 2229-371X, Impact factor-0.92, Volume 3, (pp: 39-45) No.5, May-2012.
- (2012-12) "Importance of e-learning in education", National Workshop on "Computer Applications in Science Teaching, Learning & Research", organized by Govt.E.Raghvendra Rao P.G. Science College, Bilaspur (C.G), on 1-2 February, 2013.(Invited Talk)
- (2012-13) "Classification of Multi Class Data Set by Using Data Mining Classifiers", International journal of creative research thoughts, ISSN: 2320-2882, Volume 1, issue 4, (PP: 1-11), April 2013, global impact factor 0.554.
- 20. (2012-13) Classification of Multi Class Data Set by Using Data Mining Classifiers", National Seminar on "Adaptive Brain Interfaces With Technical Innovation", Organized by Mansa Polytechnic College, Bhilai (C.G), on March 6-7, 2013.(Presented)
- 21. (2012-13) "Information Dissemination System with Emerging Technologies for Rural Communities", National conference on "Advanced Computer Applications on rural Development (ACARD-2013)" Organized by the Department of Computer Application, BIT, DURG (C.G), on March 8-9, 2013.(Presented)
- (2012-13) "Ensemble Data Mining Model for Classification of Pima Indian Diabetes Data set", Proceeding of International Joint Conference on Advance Engineering & Technology, ISBN: 978-93-81693-88-22, Raipur, (PP: 16-22)9th-10th, April 2013. (Presented & Full Paper in Conference Proceeding)
- <u>(2012-13)</u> "Estimation and Comparison of Classification Models by Using Numeric Predictor on Iris Data Set (AICON-13)", All India Conference on "Global Innovations in Computer Science and Engineering and Information Technology, Organized by CSIT, Durg (C.G), on April 12-13, 2013., (PP: 1.30-1.39) ISBN: 978-81-923288-1-2. (Presented & Full Paper in Conference Proceeding)

- 24. (2013-14) "A Comparative Study on Classification of Cancer Data Set by using Various Data Mining Classifiers", International Conference on Emerging Trends in Electrical, Electronics, Instrumentation & Computer Engineering (ETEICE), Organized by Bhilai Institute of Technology, Raipur & Institute for Research and Development India, Bhubaneswar, on March 27,2014,(pp:10),ISBN: 973-3642-24819-7. (Presented & Full Paper in Conference Proceeding).
- 25. (2013-14) "A Hybrid Approach for Weight optimization of Neural Network by Using Genetics algorithm on Forecasting Data Set", All India Conference AICON organized by CSIT, Durg, C.G,ISBN: 978-81-923288-2-9, April: 25-26, 2014, pp:48-53. (Published and Presented).
- 26. (2014) "Accurate Diagnosis of Diseases by using Data Mining Techniques for Rural Mass", (Presented)
- 27. (2013-14) "Accurate Diagnosis of Diseases by using Data Mining Techniques for Rural Mass", International Journal of Advanced and Innovative Research, impact factor 0.349, ISSN: (2278-7844) / # 28 / Volume 3 Conference Issue 1, pp: 28-31, May, 2014.
- 28. (2014-15) "A Comparative Study of Classifiers on Recognition of Offline Handwritten Odia Numerals", IEEE, International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO)–2015, Organized by Vignan's Institute of Engineering and Technology, Vizag, 24<sup>th</sup> & 25<sup>th</sup> January 2015, Volume 5, 978-1-4799-7676-8, pp:2482-2486, IEEE digital explore, DOI:10.1109/EESCO.2015.7253699) (Presented & Full Paper in Conference Proceeding)
- <u>(2014-15)</u> "A Survey on Odia Character Recognition", International Journal of Emerging Science and Engineering, ISSN:2319-6378, Volume-3, Issue-4, February 2015, ISSN: 2319–6378(Online), pp: 15-25, Impact Factor: 3.21
- 30. (2014-15) "Ensemble of Weak Learners on Recognition of Odia Numeric Digits", In proceedings of International Seminar On Non-Conventional Energy Sources for Sustainable Development of Rural Areas, Organized by Parthivi College of Engineering and Management, Bhilai,21<sup>st</sup> & 22<sup>nd</sup> March 2015. (Presented).
- 31. (2014-15) "Ensemble of Weak Learners on Recognition of Odia Numeric Digits", International Journal of Engineering Research & Technology (IJERT), ISNCESR-2015, Volume-3, Issue-20, pp: 125-128, ISSN: 2278-0181, impact Factor: 3.127
- 32. (2014-15) "Real coded Genetics algorithms based neural network model for Odia numerals recognition", National Seminar on Innovation and Research in Science, Management and

Technology(IRSMT), Organized by Bilaspur University, Bilaspur(C.G), 29<sup>th</sup> & 30<sup>th</sup> March, 2015.(**Presented**)

- 33. (2014-15) "Recognition of Handwritten Odia Numerals by using Prune Neural Network Model", All India Conference on "SUSTAINABLE PRODUCT DEVELOPMENT", April 24<sup>th</sup> 25<sup>th</sup>, 2015 Chhatrapati Shivaji Institute of Technology, Shivaji Nagar, Durg,(C.G.) India 491001 ISBN: 978-81-923288-3-6 (Presented & Full paper in Conference Proceeding)
- 34. (2014-15, June) "An Efficient Technique for Recognition of Odia Numerals Using Particle Swarm Optimized Based FLANN Model with Gradient Feature", International Conference Organized by Rungta Engineering College, Durg, Chhattisgarh, 29-30<sup>th</sup> June. (Presented)
- 35. (2014-15, June) "An Efficient Technique for Recognition of Odia Numerals Using Particle Swarm Optimized Based FLANN Model with Gradient Feature", Rungta International Journal of Computer Science and Information Technology, Volume 1, Issue 1, 29<sup>th</sup> – 30<sup>th</sup>, June, 2015, pp: 37-42.
- 36. (2015-16, August) "Real Coded Genetic Algorithm Based Neural Network Model for Odia Numerals Recognition", International Journal of Research Studies in Computer Science and Engineering (IJRSCSE) August 2015, PP 7-14 ISSN 2349-4840 (Print) & ISSN 2349-4859 (Online)
- 37. (2015-16) "Performance Comparison of Ensemble Models for Recognition of Offline Handwritten Odia Numerals", International Conference on Power, Communication and Information Technology Conference (PCITC) Siksha 'O' Anusandhan University, Bhubaneswar, India, 15<sup>th</sup> 17<sup>th</sup> October,2015, 978-1-4799-7455-9/15/\$31.00 ©2015 IEEE, DOI: 10.1109/PCITC.2015.7438187,INSPEC accession number 15885943, publisher IEEE, pp:29-35, (Presented & Full Paper in Conference Proceeding)
- 38. (2015-16) "Odia Handwritten Vowel Recognition System using Discrete Cosine Transform and C5.0 Decision Tree Classifier", All India Conference on "CLEAN AND GREEN TECHNOLOGY", April 22nd – 23rd, 2016 Chhatrapati Shivaji Institute of Technology, Shivaji Nagar, Durg,(C.G.) India – 491001, pp:926-931, ISBN: 978-81-923288-4-3. (Presented & Full Paper in Conference Proceeding)
- 39. (2016-17) "Recognition of Vowels using Curvature Features and Genetic algorithm based FLANN model", AICON'17, All India conference on digital engineering organized by CSIT, DURG, 21<sup>st</sup> -22<sup>nd</sup> April 2017, ISBN: 978-81-923288-5-0, pp: (Presented & Full Paper in Conference Proceeding)
- 40. (2016-17) "Odia Handwritten Vowel Recognition System using Slantlet Transform and Differential Evolution based Functional Link Artificial Neural Network Classifier",

International Journal of Advanced Research in Computer Science, UGC Approved Journal, Volume 8, No. 5, May-June 2017, ISSN No. 0976-5697, pp: 253-260

- **41.** (2016-17) "On Development and Performance Evaluation of Novel Odia Handwritten Digit Recognition Methods", Arabian Journal for Science and Engineering, SCI Journal, 20 June 2017, ISSN 2193-567X, DOI 10.1007/s13369-017-2652-6, pp:1-15
- **42.** (2017-18) "Application of Natured Inspired Technique to Odia Handwritten Numeral Recognition, Modeling, Book Chapter in Handbook of Research on Modelling, Analysis, and Application of Nature-Inspired Metaheuristic Algorithms, August, IGI, Publication, pp. 377-399, 2017.(ISBN : 9781522528586)
- **43.** (2017-18) "Survey on Recent Text Line Segmentation Methods of Unconstrained Handwritten Documents", **IEEE International Conference** on Energy, Communication, Data Analytics and Soft Computing (ICECDS 2017), 1-2 August, 2017, IEEE digital explore.
- (2017-18) "Recognition of Handwritten Numerals using Curvature Transform and CSO based FLANN Classifier, National Conference on Soft Computing and Intelligent Techniques in Science and Engineering (SCITSE), Organized by Department of CSE, NIT, Raipur, 25<sup>th</sup> November, 2017. (Presented)
- **45.** (2017-18) "Classification of diabetes dataset using multilayer Artificial Neural network and C.5 algorithm ", National Conference on Emerging Trends in Information Technology and Management (ETITM) organized by Department of IT, Raipur, 12<sup>th</sup> December, 2017.(Presented).
- **46.** (**2017-18**) "Optimization of Recognition Accuracy using Gradient based Transform and Clonal Selection Algorithm ", **National Conference** on Emerging Trends in Information Technology and Management (ETITM) organized by Department of IT, Raipur, 12<sup>th</sup> December, 2017.(**Presented**).
- 47. (2017-18,16 Feb), "Recognition of Odia Handwritten Numerals using Gradient based Transform and Clonal Selection Algorithm", National Conference on Data Analytics, Machine Learning and Security (NCDAMLS-2018) organized by department of CSIT, GGV, Bilaspur, 15<sup>th</sup> -16<sup>th</sup>, February, 2018. ISBN Number: 978-93-5291-457-9. (Presented & Full Paper in Conference Proceeding).
- 48. (2017-18, 23-26, Feb) "Comparative Analysis of Various Transform on Odia Handwritten Vowels using Support Vector Machine Classifier", International Conference on Mathematical Sciences and Applications (ICMSA-2018) organized by the department of Pure and Applied Mathematics, GGV, Bilaspur, 23<sup>rd</sup> 25<sup>th</sup>, February, 2018.(Presented).

- **49.** (2018-19, 4-5 August) "Application of Cat Swarm Optimization for Recognition of Handwritten Numerals", International Conference on Innovative Research in Science, Management and Technology (ICIRSMT-2018) held during 4-5 August, 2018, organized by Bilaspur University. (**Presented**).
- 50. (2018-19,Feb) "Application of Cat Swarm Optimization for Recognition of Handwritten Numerals", International Journal of Computer Sciences and Engineering (IJCSE), Vol.7 (3), E-ISSN: 2347-2693. (UGC Approved Journal)
- 51. (2018-19 Apr-Jun) "Recognition of Odia Handwritten Digits using Gradient based Feature Extraction Method and Clonal Selection Algorithm", International Journal of Rough Sets and Data Analysis", Volume 6, Issue 2, pp. 19-33, April-June 2019, ISSN: 2334-4598[EISSN: 2334-4601]DOI: 10.4018/IJRSDA.
- 52. (2019-2020, 4-5 January), "Classification of Cancer Data Set using Ensemble Classifiers Approach", International Conference on Innovative Research in Science, Management and Technology (ICIRSMT 2020) during January 4-5, 2020 organized by Department of Computer Science and Application, Atal Bihari Vajpayee University, Bilaspur (C.G.), India .(Presented)

#### **Best Paper Award:**

 (2014-2015) Best Paper Award for the presentation on "Ensemble of Weak Learners on Recognition of Odia Numeric Digits", In International Seminar on Non-Conventional Energy Sources for Sustainable Development of Rural Areas, Organized by Parthivi College of Engineering and Management, Bhilai, 21st & 22<sup>nd</sup> March 2015

# **Invited Talk:**

- (2012) National Conference, C.V.R, University, Bilaspur, Chhattisgarh, 2012.
- (2013) National Workshop, Science College, Bilaspur, Chhattisgarh, 2013.

# **Training Programme Attended:**

- **1. Refresher Course** on "ICT- Applications", 30 Nov to 19 DEC 2009, Organized by Academic Staff College, GGV, Bilaspur.
- 2. Orientation Programme from 26/11/12 to 22/12/12 Organized by Academic Staff College, GGV, Bilaspur.

- **3. Refresher Course** on "Cloudera: Big Data and Cloud Analytics", Organized by JNTU, Hyderabad, Andhra Pradesh from 10-11-2014 to 29-11-2014.
- **4. Online refresh course on** "Neural Networks and Deep Learning", SWAYAM ARPIT ONLINE COURSE, for Career Advancement Scheme (CAS) promotion, 30/03/19.

## **Others**

- (2017-2018) Co-Convener of National Conference on Data Analytics, Machine Learning and Security (NCDAMLS-2018) organized by department of CSIT, GGV, Bilaspur, 15<sup>th</sup> -16<sup>th</sup>, February, 2018.
- (2017-2018) Edited Proceeding of National Conference on Data Analytics, Machine Learning and Security (NCDAMLS-2018) organized by department of CSIT (NCDAMLS-2018), GGV, Bilaspur, 15<sup>th</sup> -16<sup>th</sup>, February 2018, in electronic format with ISBN number: 978-93-5291-457-9 in electronic format.
- Project Guidance to B.Sc (CS), MCA, M.Sc(CS) Students: More than 300