CURRICULUM VITAE

Name- Dr Babita Pandey
Designation- Assistant Professor
Department- Department Computer Science
School- School of Information Science and Technology

Tel No:
Mob No.: 9779683494
Email: pandey.babita80@gmail.com
Webpage: www.bbau.ac.in

Education Qualification

	Organization	Year of award
BSc.	**Mahila Vidyalaya, Lucknow University**	**1997**
MCA	**IGNOU**	**2002**
Ph.D.	**IIT-BHU**	**2009**

Professional Experience (In Years)

Teaching Experience:11 years
Research Experience: 14 years

Areas of Research

Machine Learning
Social Network
Deep learning
ELearning
Expert System

Research/Consultancy Grants

Title of Projects	Funding Agency	Duration (Specific Dates)	Total grant	Role (PI/CO-PI)
UGC startup project entitled "Diagnosis of neuromuscular disorder using deep-learning architecture", 2019-20, RS., 10,00,000/-	UGC	2 years	10,00,000	PI

Publications

International

1. Babita Pandey and R.B. Mishra, An integrated intelligent computing model for the interpretation of EMG based neuromuscular diseases, *Expert Systems with Applications* 36 (5) (2009) 9201–9213. **(IF = 5.89)** Elsevier **(SCI indexed)**

2. Babita Pandey, Praveen Kumar Bhanodia, Aditya Khamparia, Devendra Kumar Pandey, A Comprehensive Survey of Edge Prediction in Social Networks: Techniques, Parameters and Challenges, Expert Systems with Applications, Vol. 124,2019, pp. 164-181. **(IF 5.89) (SCI**

Indexed).

3. Babita Pandey and R.B. Mishra, Knowledge and intelligent computing system in medicine, *Computers in Biology and Medicine* 38 (2008) 1133–1139**. (IF=2.83)** Elsevier **(SCI indexed).**

4. Aditya Khamparia, Babita Pandey, Threat Driven Modeling Framework Using Petri Nets for e learning System. In: SpringerPlus (2016) 5: 446 pp 2-16. **(IF=0.982)(SCI indexed).**

5. D. Anand, Babita Pandey, D.K. Pandey A novel hybrid feature selection model for classification of neuromuscular dystrophies using Bhattacharyya coefficient genetic algorithm and radial basis function based support vector machine, Interdisciplinary Sciences: Computational Life Sciences, *(Springer)*2018 Jun;10(2):244-250. **(IF=1.41) (SCI indexed)**

6. R.K. Kaur, Babita Pandey and Lalit Singh, Security Analysis of Safety Critical and Control Systems A Case Study of Nuclear Power Plant System, Nuclear Technology, 197(3) , pp296-307, 2017, **(IF=0.745) (SCI indexed).**

7. **Raj Kamal Kaur, Babita Pandey, Lalit Singh,** Dependability Analysis of Safety Critical Systems: Issues and Challenges, Annals of Nuclear Energy, 120 (2018), 127-154. (**IF =1.476) (SCI Indexed).**

8. Aman Sing and Babita Pandey, A New Intelligent Medical Decision Support System Based on Enhanced Hierarchical Clustering and Random Decision Forest for the Classification of Alcoholic Liver Damage, Primary Hepatoma, Liver Cirrhosis, and Cholelithiasis," J. of Healthcare Engineering, vol. 2018, 9 pages, 2018. **(IF 1.295) (SCI Indexed).**

9. Raj Kamal Kaur, Babita Pandey, Lalit Singh, Security Analysis of Smart Grids: Successes and Challenges, IEEE Consumer electronics magazine, 8(2), 10-15, 2019. **(IF 3.273)(SCI Indexed).**

10. **Aditya Khamparia, Babita Pandey Effects of Visual map embedded approach on students learning performance using Briggs-Myers learning style in Word Puzzle gaming course,** Computers & Electrical Engineszzering**, vol. 66, 2018,pp. 531-540 (IF 2.189)(SCI Indexed).**

11. Aditya Khamparia, Aman Singh, Ashish Kr Luhach, Babita Pandey, Devendra K Pandey (2019) Classification and Identification of Primitive Kharif Crops using Supervised Deep Convolutional Networks, Sustainable Computing: Informatics and Systems, https://doi.org/10.1016/j.suscom.2019.07.003. **(IF 1.8) (SCI Indexed).**

12. Nguyen Gia Nhu, Babita Pandey, Deepak Gupta, Joel J. P. C. Roderigues, Ashish Khanna, Prayag Tiwari, Investigating the Importance of Psychological and Environmental Factors for Improving Learner's Performance using Hidden Markov Model, IEEE ACCESS, Vol 7(1), 2019, 21559-21571 (**IF 4.09) (SCI Indexed).**

13. Aditya Khamparia, Deepak Gupta, Ngnyen Gia Nhu, Ashish Khanna, Babita Pandey, Prayag Tiwari, Sound classifictoin of using convolution neural network and tensor deep stacking network, IEEE Access, vol. 7, 2019, 7717-7727 **(IF 4.09) (SCI Indexed).**

14. Aditya Khamparia; Babita Pandey; Shrasti Tiwari Tiwari; Deepak Gupta, PhD; Ashish Khanna, PhD; Joel Rodrigues, PhD, An Integrated Hybrid CNN-RNN Model for Visual Description and Generation of Captions, Circuits, Systems, and Signal Processing, 2019, (IF=1.9) **) (SCI Indexed).**

15. Aditya Khamparia, Gurinder Saini, Babita Pandey, Shrasti Tiwari, Deepak Gupta, Ashish Khanna KDSAE: Chronic kidney disease classification with multimedia data learning using deep stacked autoencoder network. Multimedia Tools and Applications, pp-1.6, 2019.

(IF 2.101) (SCI Indexed).

16. Aman Singh, Jaydip Chandrakant Mehta, Divya Anand, Pinku Nath, Babita Pandey, Aditya Khamparia, An Intelligent Hybrid approach for hepatitis diseases diagnosis: combining enhanced k-means clustering and improved ensemble learning, Expert Systems, pp-1-13. **(IF 1.5) (SCI Indexed).**

17. Aditya Khamparia, babitapandey, Devendra Kr. Pandey, Ashish Khanna, Victor Albuquerque, Comparison of RSM, ANN and Fuzzy Logic for extraction of Oleonolic Acid from Ocimum sanctum, Computers in industry, 117, 2020. . **(IF 3.93) (SCI Indexed).**

18. Bhanodia, P. K., Khamparia, A., & Pandey, B. Supervised shift k-means based machine learning approach for link prediction using inherent structural properties of large online social network. Computational Intelligence. 2020. doi:10.1111/coin.12372. **(IF 1.101) (SCI Indexed).**

19. Babita Pandey and R.B. Mishra , A novel method for the selection of expert systems using case-based reasoning, International Journal of Knowledge Engineering and Soft Data Paradigms *(Inderscience)*, 1 (2) (2009) 112-130. **(Scopus indexed)**

20. Babita Pandey and R.B. Mishra, An integrated intelligent computing method for the detection and interpretation of ECG based cardiac diseases, International Journal of Knowledge Engineering and Soft Data Paradigms,*Vol. 2 (2),2010 182-203.* **(Scopus indexed)**

21. Babita Pandey and R.B. Mishra, Data mining and CBR integrated methods in medicine A review, International Journal of Medical Engineering and Informatics,2 (2), (2010), 205-218. **(Scopus indexed)**

22. Babita Pandey and R.B. Mishra, Case-based reasoning and data mining integrated method for the diagnosis of some neuromuscular disease, International Journal of Medical Engineering and Informatics *(Inderscience), 3(1), (2011), 1-15.***(Scopus indexed)**

23. Babita Pandey and R.B. Mishra, Performance Index Assessment of Intelligent Computing Methods in EMG based Neuromuscular Diseases,International Journal of Knowledge Engineering and Soft Data Paradigms, *Vol 4, (1) (2013) 42-71.* **(Scopus indexed).**

24. Babita Pandey and R.B. Mishra, Data mining models for the diagnosis of EMG based neuromuscular disease, International Journal of Biomedical Engineering and Technology *(Inderscience), 6(2), (2011), 109-128*. **(Scopus indexed)**

25. Babita Pandey and R.B. Mishra, Integrated intelligent computing models in medicine, International Journal of Computational Intelligence and Healthcare Informatics, 3 (1) (2010) 49-54. **(Scopus indexed)**

26. M Gangwar, RB Mishra, RS Yadav, B Pandey, Intelligent Computing Model for The Interpretation of Neuropsychiatric Diseases Based on Rbr-Cbr-Ann Integration, International Journal of Computers & Technology, 11 (5),2013,pp. 2490-2511

27. Babita Pandey and R. B. Mishra, An Intelligent Model for two Level Diagnosis of Neuromuscular Diseases, International Journal of Knowledge Engineering and Soft Data Paradigms *(Inderscience)*, Vol 4, issue 2, 2014, pp 199-226. **(Scopus indexed)**

28. Aman Singh and Babita Pandey, Intelligent techniques and applications in liver disorders: a survey, International Journal of Biomedical Engineering and Technology *(Inderscience)*, Vol. 16, No. 1, 2014, pp 27-70. **(Scopus indexed)**

29. Babita Pandey and Deepika Kundra, Diagnosis of EEG based diseases using data mining and

case based reasoning, IJ Intelligent Systems Design and Computing *(Inderscience)*, Vol. 1, No. 1/2, 2017 pp. 43-55. **(Scopus indexed)**

30. Babita Pandey, Aditya Khamparia, Raman, Performance Analysis of Adaptive Intelligent Tutoring System, International Journal of Applied Engineering Research, vol. 10, Issue 69, 2015, pp.223-236 **(Scopus indexed)**

31. Divya, Babita Pandey and D.K. Pandey Knowledge and Intelligent Computing Techniques in Bioinformatics, International Journal of Computational Biology and Drug Design *(Inderscience)*, Vol. 9, No. 3, 2016, pp. 172-273. **(Scopus indexed)**

32. Aditya Khamparia, Babita Pandey Knowledge and Intelligent Computing Methods in E learning, International Journal of Technology Enhanced Learning *(Inderscience)*, Vol. 7(3), pp 221-242, 2015. **(Scopus indexed)**

33. Aditya Khamparia, Babita Pandey, A Novel Method of Case Representation and Retrieval in CBR for e learning, Education and Information Technologies, (2015), vol 22(1) pp 337-354.**(Scopus indexed)**

34. Aman Singh and Babitapandey, Diagnosis of liver disease by using least squares support vector machine approach, International Journal of Healthcare Information Systems and Informatics Volume 11, Issue 2, April-June 2016 PP. 62-76. **(Scopus indexed)**

35. Divya Anand, Babita Pandey, D.K. Pandey, An Integrated Algorithm for Dimension Reduction and Classification Applied to Microarray Data of Neuromuscular Dystrophies, Indian Journal of Science and Technology, Vol 9(28), 2016, pp. 1-6, **(Scopus indexed)**

36. Aman and Babita Pandey, An Efficient Diagnosis System for Detection of Liver Disease Using a Novel Integrated Method Based on Principal Component Analysis and K Nearest Neighbor (PCA-KNN), International Journal of Healthcare Information Systems and Informatics, Vol 11, Issue 4, pp. 55-68, 2016 **(Scopus indexed)**

37. Aman Singh and Babita Pandey, Liver disorder diagnosis using linear, nonlinear and decision tree classification algorithms, International Journal of Engineering and Technology (IJET), vol 8(5), 2016, pp. 2059-2069, **(Scopus indexed)**

38. Aditya Khamparia, Babita Pandey.: Effects of Visual Mapping placed game based learning on students learning performance in defense based courses, Int. J. Technology Enhanced Learning, Vol. 9, No. 1, 2017 35-49. **(Scopus indexed)**

39. Divya Anand, Babita Pandey, D.K. Pandey, Facioscapulohumeral muscular dystrophy diagnosis using hierarchical clustering algorithm and k nearest neighbor based methodology, InternationalJournal of E-Health and MedicalCommunications, vol 8 (2), pp 33-45, 2017, **(Scopus indexed)**

40. Aman and Babita Pandey, A KLD LSSVM based computational method applied for feature ranking and classification of primary biliary cirrhosis stages, International Journal of Computational Biology and Drug Design, vol. 10, issue 1, pp. 24-38, 2017**(Scopus indexed)**

41. Anand Divya, Pandey B, Pandey DK, Building an intelligent integrated method of gene selection for facioscapulohumeral muscular dystrophy diagnosis. International Journal of Biomedical Engineering and Technology vol 24(3) 2017, pp. 285-296.**(Scopus indexed)**

42. Aditya Khamparia, Babita Pandey, Comprehensive analysis of Semantic web reasoners and tool: A survey, Education and Information technologies, Springer, 22(6), pp 1–25 2017**(Scopus indexed)**

43. S Takkar, A Singh, B Pandey, Application of Machine Learning Algorithms to a Well Defined Clinical Problem: Liver Disease, International Journal of E-Health and Medical Communications, 8(4), pp. 38-60, 2017, 23. **(Scopus indexed)**

44. Arun Malik, and Babita Pandey, CIAS: A comprehensive Identity Authentication Scheme for providing Security in VANET, International Journal of Information Security and Privacy, Volume 12, Issue 1, January-March 2018, pg 29-41**(Scopus indexed)**

45. Aditya Khamparia, Babita Pandey, SVM and PCA Based Learning Feature Classification Approaches for E-Learning System, International Journal of Web-Based Learning and Teaching Technologies, vol 13(2), 2018, pp. 32-46. **(Scopus indexed)**

46. Arun Malik, Babita Pandey, Security Analysis of Discrete Event Based Threat Driven Authentication Approach in VANET using Petri Nets, International Journal of Network Security, Vol 20, pp. 601-608, 2018 **(Scopus indexed)**

47. **Arun Malik, Babita Pandey, Secure Model to Generate Path Map for Vehicles in Unusual Road Incidents using Association Rule Based Mining in VANET,Journal of Electronic Science and Technology, 16(2): pp. 153-162 JUNE 2018. (Scopus indexed)**

48. Divya Anand and Babita Pandey A novel approach for gene selection and multi-class classification of neuromuscular disorders: Combining median matrix and radial basis function based support vector machine, International Int. J. Computational Biology and Drug Design, Vol. 11, No. 4, 2pp 328-345, 2018.**(Scopus indexed)**

49. **Babita Pandey and Raj Kamal Kaur, An Intelligent Model for diagnosis of breast cancer, International Journal of Advanced Intelligence Paradigms, (Scopus indexed)**

50. Aditya Khamparia, Babita Pandey, Performance index assessment of intelligent computing methods in e-learning systems, International Journal of Advanced **Intelligence Paradigms, 2018,** 10(1):1**(Scopus indexed)**

51. WasiurRhmann, Gufran Ansari, babitapandey, devendrapandey, Software fault prediction based on change metrics using Hybrid algorithms: An empirical Study, Journal of King Saud University - Computer and Information Sciences, 2020, 32(4), pp. 419-424. **(Scopus indexed).**

52. Aditya Khamparia, BabitaPandey , Association of learning styles with different e-learning problems: a systematic review and classification, Education and Information Technologies, pp 1-29. **(Scopus indexed)**

53. Aditya Khamparia, Babita Pandey, A Novel Integrated Principal Component Analysis and Support vector Machines based diagnostic system for detection of Chronic Kidney disease, International Journal of Data Analysis Techniques and Strategies, 2020, 12(2), pp. 99-113. **(Scopus indexed)**

54. Devendra Kumar Pandey, Babita Pandey, R.M. BanikOptimization of Barbaloin Extraction FromaloeVeraleaf Skin By Adaptive Neuro-Fuzzy Interface System, Support Vector Regression, Response Surface Methodology, THINK INDIA Journal, Vol 22, Issue 19, 2019. **(Scopus indexed)**

55. Aditya Khamparia, Babita Pandey, Effects of microworld game-based approach on neuromuscular disabled students learning performance in elementary basic science courses, Education and Information Technologies, 2020. **(Scopus indexed)**

56. Aditya Khamparia, babitapandey, Devendra Kr. Pandey, Ashish Khanna, Victor Albuquerque, comparison of RSM, ANN and Fuzzy Logic for extraction of Oleonolic Acid from Ocimum sanctum, Computers in

industry, In press. ISSN: 0166-3615**(IF 4.769) (SCI Indexed).**

57. Devendra Kumar Pandey, Babita Pandey, R.M. BanikOptimization of Barbaloin Extraction FromaloeVeraleaf Skin By Adaptive Neuro-Fuzzy Interface System, Support Vector Regression, Response Surface Methodology, THINK INDIA Journal, Vol 22, Issue 19, 2019, pp: 1472-1488. ISSN:0971-1260.

58. PK Bhanodia, A Khamparia, B Pandey, Supervised shift k-means based machine learning approach for link prediction using inherent structural properties of large online social network, Computational Intelligence. doi:10.1111/coin.12372 **(IF 1.101) (SCI Indexed).**

59. Babita Pandeywasiurrhmann, Devendra Kumar Pandey, A comprehensive survey of deep learning in the field of medical imaging and medical naturallanguage processing: challenges and research directions. Journal of King Saud University- Computer and Information Sciences. 2021 Accepted in press **(SCI index).**

National

Author/s (Year), Title, Name of Journals, Volume (Issue), Page no.

Book Chapters

1. Aditya Khamparia, Babita Pandey.: Book Chapter on Impact of Interactive Multimedia in E-Learning Technologies: Role of Multimedia in E-Learning. In: Enhancing Academic Research with Knowledge Management Principles Idea Group Publisher (IGI Global), USA. (2017). Online Doi: 10.4018/978-1-5225-2489-2.ch007, ISBN13: 9781522524892|ISBN10: 1522524894|EISBN13: 9781522524908 (API 7)
2. Aditya Khamparia, Babita Pandey, An Adaptive Java Tutorials Using HMM-Based Approach, In book: Smart Innovations in Communication and Computational Sciences, January 2019, DOI: 10.1007/978-981-10-8968-8_9. ISSN: 978-981-10-8967-1
3. Praveen Kumar Bhanodia, Kamal Kumar Sethi, Aditya Khamparia, Babita Pandey and ShaligramPrajapat, Similarity-Based Indices or Metrics for Link Prediction, Hidden Link Prediction in Stochastic Social Networks, edited by Babita Pandey and Aditya Khampariya, IGI Global Publisher, 2019. pp-1-29. ISSN: 2328-1405
4. Praveen Kumar Bhanodia, Aditya Khamparia, Babita Pandey, ShaligramPrajapat, Online Social Network Analysis (pages 50-63), Hidden Link Prediction in Stochastic Social Networks, edited by Babita Pandey and Aditya Khampariya, IGI Global Publisher, 2019, pp 30-49. ISSN: 2328-1405
5. Bhanodia, P.K., Khamparia, A., Pandey, B. An approach to predict potential edges in online social networks (2021) Lecture Notes in Networks and Systems, 132, pp. 1-6.

Edited Books

Hidden Link Prediction in Stochastic Social Networks, edited by Babita Pandey and Aditya Khampariya, IGI Global Publisher, 2019ISBN13: 9781522590965

Author/s (Year), Title, Name of Book, Publisher, Edition, ISBN No., Page no.

Research Supervision

	Completed	Ongoing
PG/M.Phil	7	
Ph.D	6	
Post-Doctoral		

Honors, Recognition and Awards

- *7-6-2004 to 31-12-2004 SRF at National Bureau FGR, Government of India.
- Jan, 2007- Aug, 2008 B.H.U Fellowship (UGC) to carryout PhD work
- Best paper award, National Conference on Emerging Trends in Information Technology (NCETIT-2012), November 24, 2012, IMS, Ghaziabad
- Best paper award, International multi track conference on science, engineering and technical Innovations, 3-4 June, 2014, CT Group of institutions, Jalandhar, Panjab, India
- Best Researcher Award, 2013, Lovely professional University
- 2 Best Paper award, ICCS Shannon 100 Conference, 8-9 April, 2016, Lovely professional University
- Best Researcher Award worth Rs 50,000/-2015, Lovely professional University

Membership of Professional Bodies

- Member of ACM Membership number: 5957999
- Institution of Engineering and Technology (IET): membership number is 1100690560
- Life time Member of Avadh Vigyan Bharti- VA0024.
- Life time membership of Awadh ItihasSankalan

Seminar/Conference/Symposia /Workshops Organised

Countries Visited

* Singapore

Invited Lectures/Talks/Chair/Co-Chair in Seminar/Conference/Symposia /Workshops

- Expert talk on Rule base reasoning and case base reasoning in one week faculty development program held, 9 -13 June, 2014 at CT group of institution in association with PTU.
- Conducted training on Towards Research Excellence in Lovely Professional University held from 1 June, 2014 to Dec, 2014.
- Expert talk on Artificial Intelligent Techniques in Engg. Applied Sciences one week faculty development program held, 23 -27 March, 2015 at CT group of institution in association with PTU.
- Expert talk on new ***Intelligent Computing Methods in neuromuscular disease diagnosis*** and ***Genetic level neuromuscular disease analysis*** in one week QIP short term course on Computation Biology in Neuroscience held, 13th-18th June, 2016 at Indian Institute of Technology – Banaras Hindu University.
- Keynote speaker on " Application of Combined Case Base Reasoning and machine learning methods" 17-18 March, 2017, In International Conference on Advanced Informatics for Computing Research held at Lyallpur Khalsa College of Engineering, Jalandhar.
- Expert Talk on Security Analysis of Safety Critical System, In Gurukul Kangari University, Haridwar, India.