

Profile Page



Name : Dr Neha Yadav
Designation : Assistant Professor Grade-i
Department : Mathematics
Qualification : Post Doc (Korea University, S. Korea)
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Research Interests :

Numerical solution of boundary value problems, Artificial Neural Networks and Optimization Techniques

Other Profile Links :

Google Scholar Link :

Dr. Neha Yadav [Click Here](#)

Journal Publications :

Year	Journal	Publication
2023	Applied Soft Computing, Volume 134, February 2023, 110019	A novel hybrid model combining BSARMA and LSTM for time series forecasting
2022	Engineering Applications of Artificial Intelligence, Vo. 115, 105289	Numerical solution of Generalized Burger- Huxley & Huxley's equation using Deep Galerkin neural network method
2022	Journal of Applied Analysis and Computation, Vol.12, Issue 4, 1277-1293	An algorithm for numerical solution of differential equations using Harmony search and neural networks
2020	Neural Computing and Applications, Vol 32, pp 2423–2444	Self-adaptive global mine blast algorithm for numerical optimization
2019	Journal of Experimental and Theoretical Artificial Intelligence, Vol 31, Issue(5),pp 701-721	Stability and iterative convergence of water cycle algorithm for computationally expensive and combinatorial Internet shopping optimisation problems
2018	Neural Computing and Applications, Vol. 30 Issue 3, pp. 917-924	A length factor artificial neural network method for the numerical solution of the advection dispersion equation characterizing the mass balance of fluid flow in a chemical reactor
2017	Neural Computing and Applications, Vol. 28 Issue 1, pp. 171-178	An Efficient Algorithm based on Artificial neural network technique for solving Troesch's problem
2017	Journal of Experimental and Theoretical Artificial Intelligence, Vol. 29 Issue 4, pp. 823-842	Metaheuristic Optimization methods for approximate solving of singular boundary value problems

2016	Computers and Mathematics with Applications, Vol. 72 Issue 4, pp. 1021-1030	Numerical solution of unsteady advection dispersion equation arising in contaminant transport in Porous media using neural networks
2015	National Academy Science Letters, Vol. 38 Issue 5, pp. 425-428	Numerical Solution of Bratu's problem using Multilayer Perceptron neural network method
2013	Journal of the Franklin Institute, Vol. 30 Issue 10 pp. 3188-3204	Buckling analysis of beam column using Multilayer perceptron neural network technique
2010	Computers and Mathematics with Applications, Vol. 62 Issue 10, pp. 3796-3811	Multilayer perceptrons and radial basis function neural network methods for the solution of differential equations: a survey

Conference Publications :

Year	Conference	Publication
2018	4th International Conference on Harmony search, Soft computing and Applications (ICHSA 2018), Gurugram, India Feb 07-09, 2018 Publisher: Springer	A comparative study of Machine Learning Algorithms for prior prediction of UFC Fight
2017	3rd International Conference on Harmony search Algorithm (ICHSA 2017) , Technalia University, Bilbao, Spain Feb 22-24, 2017 Publisher: Springer	Numerical Solution of Boundary Value Problems Using Artificial Neural Networks and Harmony Search
2017	3rd International Conference on Harmony search Algorithm (ICHSA 2017) , Technalia University, Bilbao, Spain Feb 22-24, 2017 Publisher: Springer	A Comparative Study of Exploration Ability of Harmony Search Algorithms
2015	5th International Conference on Soft computing for Problem Solving (SocPros 2015), IIT Roorkee Saharnpur Campus Dec 18-20, 2015 Publisher: Springer	Numerical solution of a class of singular boundary value problems arising in physiology based on neural networks
2015	2nd International Conference on Harmony search Algorithm (ICHSA 2015) , Korea University, Seoul, South Korea Aug 19-21, 2015 Publisher: Springer	A study of harmony search algorithms for: trajectory, convergence and stability
2014	4th International Conference on Soft computing for Problem Solving (SocPros 2014), NIT Silchar, India Dec 27-29, 2014 Publisher: Springer	Artificial Neural Network Technique for the Solution of Non-Linear Elliptic Boundary Value Problems

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book Edited	Emerging Trends in Data Driven Computing and Communications, Proceedings of DDCToT 2021	Springer	R. Mathur, C. P. Gupta, V. Katewa , D. S. Jat, N. Yadav	978-981-16-3915-9	2021
Book Edited	Proceedings of International Conference on Computational Intelligence	Springer	R. Tiwari , A. Mishra, N. Yadav, M. Pavone	978-981-16-3802-2	2021
Book Edited	Recent Trends in Communication and Intelligent Systems: Proceedings of ICRTCIS 2019	Springer	H. Sharma, A. K. S. Pundir, N. Yadav, A. Sharma, S. Das	978-981-15-0425-9	2019
Book Edited (Two volumes)	Harmony Search and Nature Inspired Optimization Algorithms, Theory and Applications ICHSA 2018	Springer	N. Yadav, A. Yadav, J. C. Bansal, J. H. Kim	978-981-13-0760-7	2019

Book	An introduction to neural network method for solution of differential equations	Springer	N. Yadav, A. Yadav, M. Kumar	978-94-017-9815-0	2015
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Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	R&D	Development of Ensemble algorithms based on Non Gaussian models and deep learning neural networks for time series forecasting	SERB	28-01-2022	28-01-2025	Rs. 6,60,000	Ongoing	NA

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	International	4th International Conference on Harmony search, Soft computing and Applications (ICHSA 2018)	BML Munjal University, Gurugram	07-02-2018	09-02-2018	Convener
STC	National	Recent Trends in Artificial Neural Networks and Optimization (RTNNO-2020)	NIT Hamirpur	18-12-2020	22-12-2020	Convener
STC	National	Recent Development in Numerical Methods for Partial Differential Equations (RD-NMPDE 2022)	NIT Hamirpur	30-05-2022	03-06-2022	Co-ordinator

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Mr. Harender Kumar	Deep learning for solving boundary value problems	Ongoing	2019	
Mr. Bhupendra Kumar	Development of novel hybrid models for time series forecasting	Ongoing	2019	Role: Co-Supervisor

Award and Honours :

Title	Activity	Given by	Year
Brain Korea 21 Post doctoral Award		Government of Republic of Korea	2015

Best Paper Award	International Conference	Korean Society of Civil Engineers	2015
NBHM Post doctoral award		NBHM	2015
Travel Grant Award	To attend 25 th Biennial Conference on Numerical Analysis held at Glasgow, U.K.	NBHM, India	2013
Summer Research Fellowship		INSA, NASI, IASc	2008