


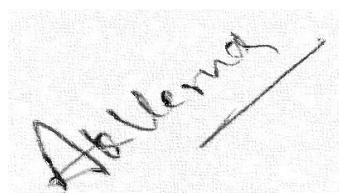


DEPARTMENT OF MATHEMATICS
DYAL SINGH COLLEGE, UNIVERSITY OF DELHI
FACULTY DETAIL



Title	Dr.	First Name	AKANKSHA	Last Name	VERMA	Photograph 
Designation		ASSISTANT PROFESSOR				
Address		Department of Mathematics Dyal Singh College University of Delhi New Delhi				
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Educational Qualifications						
Degree	Institution				Year	
PhD	Motilal Nehru National Institute of Technology Allahabad, Prayagraj				2022	
Post Graduation	Indian Institute of Technology Roorkee, Roorkee				2014	
Graduation	Chhatrapati Shahu Ji Maharaj University, Kanpur				2012	
Career Profile						
Administrative Assignments (From 1 st July 2019 onwards)						
Areas of Interest / Specialization						
Artificial Neural Networks, Numerical Analysis, Differential Equations, Fractional Differential Equations, (Singular Initial/Boundary Value Problems).						
Subjects Taught						
Differential Equations, Discrete Mathematics, Partial Differential Equations and Transform, Mathematical Foundation of Computer Science, Probability and Statistics, Algebra and Mathematical Finance.						
Research Guidance						
Publications Profile						
<ol style="list-style-type: none"> 1. A. Kumar, A. Verma, L. Rathour, L. N. Mishra and V. N. Mishra, Convergence analysis of modified Szász operators associated with Hermite polynomials, Rendiconti del Circolo Matematico di Palermo, 2023, Vol. 73, No. 3, 1-16. 10.1007/s12215-023-00931-2. 2. P. Verma, S. Tiwari and A. Verma, Theoretical and Numerical Analysis of Fractional Order Mathematical Model on Recent COVID-19 Model Using Singular Kernel, Proceedings of National Academy of Sciences, India, Section A: Physical Sciences, 2023, Vol. 93, 219–232. https://doi.org/10.1007/s40010-022-00805-9 3. A. Verma, W. Sumelka and P. K. Yadav, The Numerical Solution of Nonlinear Fractional Liénard and Duffing Equations Using Orthogonal Perceptron. Symmetry 2023, Vol. 15, No. 1753. https://doi.org/10.3390/sym15091753 4. A. Verma and M. Kumar, Multilayer Perceptron Artificial Neural Network Approach to Solve Sixth-Order Two-Point Boundary Value Problems, In: Singh, J., Anastassiou, G.A., Baleanu, D., Cattani, C., Kumar, D. (eds) Advances in Mathematical Modelling, Applied Analysis and Computation. Lecture Notes in Networks and Systems, vol 415. Springer, Singapore, 2022. https://doi.org/10.1007/978-981-19-0179-9_5 						

<p>5. A. Verma and M. Kumar, Numerical Solution of Third-Order Emden-Fowler type equations using artificial neural network technique, The European Physical Journal Plus, 2020, Vol. 135, No. 751, pp. 1-14 DOI: https://doi.org/10.1140/epjp/s13360-020-00780-3.</p> <p>6. A. Verma and M. Kumar, Numerical Solution of Bagley-Torvik Equations Using Legendre Artificial Neural Network Method, Evolutionary Intelligence, 2020. DOI: https://doi.org/10.1007/s12065-020-00481-x.</p> <p>7. A. Verma and M. Kumar, Multilayer Perceptron Artificial Neural Network: A Review, Multilayer Perceptron Theory and Application, 2020. Nova Science Publishers, New York, ISBN: 978-1-53617-364-2.</p> <p>8. A. Verma and M. Kumar, Numerical Solution of Lane-Emden type Equations Using Multilayer Perceptron Neural Network Method. International Journal of Applied and Computational Mathematics, 2019, Vol. 5, No. 141, pp. 1-14. DOI: https://doi.org/10.1007/s40819-019-0728-6.</p> <p>9. S. Srivastava, A. Verma and M. Kumar, An Elliptic Interface Problem: A Review, Applied Mathematics & information sciences Letters, 2019, Vol. 7, No. 3, pp. 51-59. 10.18576/amisl/070301.</p>
Conference Organization/ Presentations (From 1st July 2019 onwards)
<p>1. A. Verma and M. Kumar: Numerical Solution of Lane-Emden type Equations Using Multilayer Perceptron Neural Network Method, International Conference on Differential Equations and Control Problems- Modeling, Analysis and Computations, Indian Institute of Technology Mandi, Mandi, India in July, 2019.</p> <p>2. A. Verma and M. Kumar: Numerical Solution of Bagley-Torvik Equations Using Legendre Artificial Neural Network Method, International Conference on Computational Mathematics and its Application, Indian Institute of Technology Indore, Indore, India in November, 2019.</p> <p>3. A. Verma and M. Kumar: Numerical Solution of Third-Order Emden-Fowler type equations using artificial neural network technique, 3rd International Conference on Mathematical Modeling, Applied Analysis and Computation, JECRC University, Jaipur, India in August, 2020.</p> <p>4. A. Verma and M. Kumar: Multi-layer Perceptron Artificial Neural Network Approach for Solving Sixth-Order Two Point Boundary, Advances in Differential Equations and Numerical Analysis, Indian Institute of Technology Guwahati, Guwahati, India in October, 2020.</p>
Research Projects (Major Grants/Research Collaboration) (From 1st July 2019 onwards)
Awards and Distinctions (From 1st July 2019 onwards)
Association With Professional Bodies
Other Activities like MOOCs/ Patents etc. (From 1st July 2019 onwards)



Signature of Faculty Member