



## Curriculum Vitae

Title	Dr.	First Name	<b>Nirmal</b>	Last Name	<b>Yadav</b>	Photograph
Designation	Assistant Professor					
Address	D-6, Surbhi Apartment, Sushant Lok Sector-43, Gurgaon-122021					
Phone No	Office	+91-11-27666702				
	Residence					
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Educational Qualifications						
Degree	Institution				Year	
Ph. D.	Indian Institute of Technology, Roorkee				2014	
M.Sc.	University of Rajasthan, Jaipur				2008	
B.Sc.	University of Rajasthan, Jaipur				2006	
Career Profile						
Institute	Designation			Year		
Cluster Innovation Centre, University of Delhi	Assistant Professor			2014 to Till Date		
Administrative Assignments						
Member of Time table & workload Committee						
Member of Library Committee						
Member of Examination Committee						
Convenor of Grievance Committee						
Member of Student Advisory Committee						
Areas of Interest / Specialization						
<ul style="list-style-type: none"><li>· Computed Tomography</li><li>· Signal Transforms and Image Processing</li><li>· Deep Learning Techniques for Medical Imaging</li></ul>						
Subjects Taught						
<ul style="list-style-type: none"><li>· Understanding Signals (Undergraduate)</li></ul>						

- Calculus (Undergraduate and Postgraduate)
- Discrete Mathematics (Undergraduate and Postgraduate)
- Ordinary Differential Equation (Undergraduate and Postgraduate)
- Probability & Statistics (Undergraduate and Postgraduate)
- Linear Programming Problems (Undergraduate)
- Numerical Methods (Undergraduate)
- Partial Differential Equations (Undergraduate)

#### Publications Profile

- Nirmal Yadav, “A deep data–driven approach for enhanced segmentation of blood vessel for diabetic retinopathy”, International Journal of Imaging Systems and Technology, <https://doi.org/10.1002/ima.22720>, March 2022.
- Nirmal Yadav, “Retinal Blood Vessel Detection for Diabetic Retinopathy with Ridgelet Transform and Convolution Neural Network”, International Journal of Wavelets Multiresolution and Information Processing, 18, pp 1-15, September 2020.
- Nirmal Yadav and Tanuja Srivastava, “Analysis of Error in Convolution Algorithm for Tomography in Discrete Spaces”, International Journal of Applied and Computational Mathematics, 6, 2020.
- Nirmal Yadav and Tanuja Srivastava, “A Modified Convolution Back-projection Algorithm for Tomographic Image Reconstruction with Contourlet Transform” International Journal of Computing Science and Mathematics, Volume 7, No. 2, 2016.
- Tanuja Srivastava and Nirmal Yadav, “Error Estimation of Discrete Convolution Back-projection for Discrete Radon Transform” International Journal of Information and Communication Technology, Volume 7, Issue 4-5, 2015.
- D Yadav, R Bhargava, GS Agrawal, N Yadav, J Lee, MC Kim, “Thermal instability in a rotating porous layer saturated by a non-Newtonian nanofluid with thermal conductivity and viscosity variation”, Microfluidics and Nano fluidics (Springer ) 16 (1-2), 425-440, 2014.
- Tanuja Srivastava and Nirmal Yadav “On Image Reconstruction Algorithms with Discrete Radon Transform” International Journal of Applied Mathematics and Statistics, Issue: 2013, Volume 47, Issue Number: 17.
- Nirmal Yadav and Tanuja Srivastava, “Local and Global Tomographic Image Reconstruction with Discrete Radon Transform” IEEE Digital Library, 978-1- 4673-4862-1/13.

#### Conference Presentations

- Nirmal Yadav and Tanuja Srivastava, “Local and Global Tomographic Image Reconstruction with Discrete Radon Transform” International Conference on Signal Processing, Image Processing and Pattern Recognition IEEE Digital Library, 978-1- 4673-4862-1/13, ICSIPR’2013.
- Nirmal Yadav and Tanuja Srivastava, “A New Implementation of Wavelet Transform for Reconstruction of Tomographic Images” in International Conference on Advances in

Modelling, Optimization and Computing organized by Department of Mathematics, I.I.T. Roorkee Dec 5-7' 2011.

- Nirmal Yadav and Tanuja Srivastava, "Error Estimation for Cone Beam Tomography" International conference on Mathematical Sciences (Published by Elsevier) Chennai. Vol. / 2014.
- Nirmal Yadav and Tanuja Srivastava, "Convolution Backprojection Algorithm for Tomographic Image Reconstruction with Contourlet Transform" accepted in The Second International Conference on Engineering and Computational Mathematics (ECM2013), Hong-Kong.

#### Research Projects (Major Grants/Research Collaboration)

1. Innovation Project entitled 'Innovating for Village Transformation: An Exploration of the Hiware Bazaar Model of Rural Development' 2015-16, Funding agency University of Delhi.
2. Major Research Project entitled 'Development of Early Non-Invasive Diagnostic Intervention for ASD' Dec 2016, Funding Agency The Netherland Initiative for Capacity Development in Higher Education.

#### Awards and Distinctions

1. Gargi Prize for excellent performance in 10<sup>th</sup> Board examination –Rajasthan Government
2. Gate 2009
3. UGC JRF 2010- All India Rank 2018

#### Association With Professional Bodies

Life member of Ramanujan Mathematical Society  
Alumni – IIT Roorkee

#### Other Activities

- Participated in Short Term Course on Medical Imaging and Image Analysis conducted at School Medical Science and Technology, Indian Institute of Technology Kharagpur.
- Participated in Advanced Instructional School on Theoretical and Numerical Aspects of Inverse Problems organized by Tata Institute of Fundamental Research Bangalore, during 16 June 2014 to 28 June 2014.
- Participated in National Workshop on Scientific /Research Paper Writing organized by The National Academy of Sciences, India.

#### Reviewer Of Journal/Conferences

- Inderscience Publications
- International Conference on Frontiers in Science and Technology

**Programming Software:**

Python

Mat Lab

Mathematica

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A handwritten signature in blue ink, appearing to read 'Ayadew', with a horizontal line underneath the name.

Signature of Faculty Member