<table>
<tr><td>Title</td><td>Dr</td><td>First Name</td><td>R.B.</td><td>Last Name</td><td>Yadav</td><td rowspan="3">  </td></tr>
<tr><td colspan="2">Designation</td><td colspan="4">Associate Professor</td></tr>
<tr><td colspan="2">Dept. Name</td><td colspan="4">Electronics and Communication Engineering</td></tr>
<tr><td colspan="2">Address:</td><td colspan="5">G. B. Pant Institute of Engineering and Technology Pauri Garhwal Uttarakhand Pin- 246194
(An Autonomous Institute of Government of Uttarakhand)</td></tr>
<tr><td colspan="2">Phone No.</td><td colspan="5">+917895664758
+919457030308</td></tr>
<tr><td colspan="2">Email</td><td colspan="3">1. rbyiitbhu@gmail.com
2. rby_dp@rediffmail.com</td><td colspan="2">3. rbyadav@gbpiet.ac.in
4. rby_dp@yahoo.com</td></tr>
<tr><td colspan="2">Web Page</td><td colspan="5">Google Scholar Id.:
https://scholar.google.com/citations?user=sANFsg8AAAAJ&hl=en</td></tr>
<tr><td colspan="2">Subjects Taught</td><td colspan="5">Digital Signal Processing
Digital Image Processing and Applications
Pattern Recognitions
Machine Learning and its Applications
Computer Vision
Signal and Systems</td></tr>
<tr><td colspan="2">Areas of Interest/Specialization</td><td colspan="5">Digital Image Processing, Digital Signal Processing and Medical Imaging</td></tr>
<tr><td colspan="2" rowspan="4">Experience (in years)</td><td>Total</td><td colspan="4">17</td></tr>
<tr><td>Industry</td><td colspan="4">--</td></tr>
<tr><td>Teaching</td><td colspan="4">14</td></tr>
<tr><td>Research</td><td colspan="4">03</td></tr>
<tr><td colspan="2" rowspan="4">Educational Qualifications</td><td>UG</td><td colspan="4">B.Tech (ECE)</td></tr>
<tr><td>PG</td><td colspan="4">M.Tech (DSP)</td></tr>
<tr><td>Doctorate</td><td colspan="4">Ph.D (IIT-BHU) Varanasi, India.</td></tr>
<tr><td>Any other</td><td colspan="4">--</td></tr>
<tr><td colspan="2">Research Publications in International Journals:</td><td colspan="5">[1]. Karki, B., Trabelsi, Y., Uniyal, A., Pal, A., & Bharos Yadav, R. (2024). Detection of fat concentration milk using TMDC-based surface plasmon resonance sensor. Modern Physics Letters B, 2450253. https://doi.org/10.1142/S0217984924502531 (SCI IF: 1.9 & Scopus)
[2]. Bijalwan, A., Uniyal, A., Yadav, R.B. et al. Enhanced Sensing: E7-Liquid Crystal-Based Surface Plasmon Temperature Sensor with Angle Interrogation. Plasmonics (2024). https://doi.org/10.1007/s11468-024-02314-4 (SCIE IF: 3.0 & Scopus)
[3]. Karki, B., Pal, A., Sarkar, P. , Yadav, R.B. et al. Detection of Chikungunya Virus Using Tantalum Diselenide ($TaSe_2$)-Based Surface Plasmon Resonance Biosensor. Plasmonics (2023). https://doi.org/10.1007/s11468-023-02169-1 (SCIE IF: 3.0 & Scopus)</td></tr>
</table>

[4]. Karki, B., Salah, N.H., Srivastava, G. Yadav, R.B. *et al.* A Simulation Study for Dengue Virus Detection Using Surface Plasmon Resonance Sensor Heterostructure of Silver, Barium Titanate, and Cerium Oxide. *Plasmonics* **18**, 2031–2040 (2023). https://doi.org/10.1007/s11468-023-01907-9 **(SCIE IF: 3.0 & Scopus)**

[5]. Karki, B., Pal, A., Sarkar, P. Yadav, R.B. *et al.* ZnO-Silicon Enhanced Surface Plasmon Resonance Sensor for Chemical Sensing. *Silicon* (2024). https://doi.org/10.1007/s12633-024-02973-2 **(SCIE IF: 3.4 & Scopus)**

[6]. Karki, B., Trabelsi, Y., Pal, A., Taya, S. A., & Yadav, R. B. (2024). Direct detection of dopamine using zinc oxide nanowire-based surface plasmon resonance sensor. *Optical Materials*, *147*, 114555. https://doi.org/10.1016/j.optmat.2023.114555 **(SCIE IF: 3.9 & Scopus)**

[7]. Karki, B., Pal, A., Sarkar, P. Yadav, R.B. *et al.* Gold, MXene, and graphene nanofilm-based surface plasmon resonance sensor for malaria detection. *J Opt* (2024).https://doi.org/10.1007/s12596-024-01661-z**(SCImago IF: 1.8 & Scopus)**

[8]. Karki, B., Uniyal, A., Sarkar, P. Yadav, R.B. *et al.* Sensitivity Improvement of Surface Plasmon Resonance Sensor for Glucose Detection in Urine Samples Using Heterogeneous Layers: An Analytical Perspective. *J Opt* (2023). https://doi.org/10.1007/s12596-023-01418-0 **(SCImago IF: 1.8 & Scopus)**

[9]. Uniyal, A., Pal, A., Sharma, S. Yadav, R.B. *et al.* Design and performance analysis of lithium niobate waveguide-based serial parity generator and checker. *J Opt* (2023). https://doi.org/10.1007/s12596-023-01532-z **(SCImago IF: 1.8 & Scopus)**

[10]. Yadav, R. B., Srivastava, S., & Srivastava, R. (2016). A partial differential equation-based general framework adapted to Rayleigh's, Rician's and Gaussian's distributed noise for restoration and enhancement of magnetic resonance image. *Journal of Medical Physics*, *41*(4), 254-265. https://doi.org/ 10.4103/0971-6203.195190 **(SCImago IF: 0.9 & Scopus)**

[11]. Yadav, R. B., Srivastava, S., & Srivastava, R. (2017). Modified complex diffusion based nonlinear filter for restoration and enhancement of magnetic resonance images. *International Journal of Biomedical Engineering and Technology*, *23*(1), 19-37. https://doi.org/10.1504/IJBET.2017.082226 **(ESCI IF: 1.1 & Scopus)**

[12]. Yadav, R. B., Srivastava, S., & Srivastava, R. (2017). Identification and removal of different categories of noises from magnetic resonance image using hybrid partial differential equation-based filter. *International Journal of Digital Signals and Smart Systems*, *1*(2), 87-98. https://doi.org/10.1504/IJDSSS.2017.088050

[13]. Jha, B., Yadav, R,B., Rao, M., & Yadav, H. (2013). Selection of optimal mother wavelet for fault detection using discrete wavelet transform. *IEEE Transactions on Instrumentation and Measurement*, *20*(6), 2338-2343.

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Papers Published in **International Conferences:**	[1]. Yadav, R. B., Srivastava, S., & Srivastava, R. (2016, August). Identification and removal of different noise patterns by measuring SNR value in magnetic resonance images. In *2016 Ninth International Conference on Contemporary Computing (IC3)* (pp. 1-5). IEEE. https://doi.org/10.1109/IC3.2016.7880212 [2]. Yadav, R. B., Srivastava, S., & Srivastava, R. (2016, August). An efficient PDE-Based nonlinear filter adapted to Rician noise for restoration and enhancement of magnetic resonance images. In *2016 1st India International Conference on Information Processing (IICIP)* (pp. 1-5). IEEE. https://doi.org/10.1109/IICIP.2016.7975339 [3]. Tiruwa, S., & Yadav, R. B. (2018, October). Comparing various filtering techniques for reducing noise in MRI. In *2018 International Conference on Sustainable Energy, Electronics, and Computing Systems (SEEMS)* (pp. 1-5). IEEE. https://doi.org/10.1109/SEEMS.2018.8687345 [4]. Truwa, Sneha. Yadav, R. B. (2018, July). A Variational Approach to Reconstructing Mammogram Images Corrupted by Poisson Noise. *KIIT-BBSR-0654 (ICRIEECE),* IEEE [5]. Singh, Nikhil. Yadav, R. B. (2018, July). PDE-Based Filter Adapted to Poisson Noise for Restoration and Enhancement of Computed Tomography Images. *KIIT-BBSR-1010 (ICRIEECE),* IEEE
Books Authored/**Book Volume Chapters**	[1]. Singh, N., & Yadav, R. B. (2022). De-Noising of Poisson Noise Corrupted CT Images by Using Modified Anisotropic Diffusion-Based PDE Filter. In *Advance Concepts of Image Processing and Pattern Recognition: Effective Solution for Global Challenges* (pp. 121-130). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-16-9324-3_7 [2]. Tiruwa, S., Yadav, R. B., & Singh, N. (2022). Poisson Noise-Adapted Total Variation-Based Filter for Restoration and Enhancement of Mammogram images. In *Advance Concepts of Image Processing and Pattern Recognition: Effective Solution for Global Challenges* (pp. 195-202). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-16-9324-3_10
Patent Published:	[1]. AN AUTOMATIC SYSTEM FOR BRAIN TUMOUR DETECTION USING DEEP LEARNING TECHNIQUES. [2]. EFFICIENT CBCIR USING DWT AND GLCM: A PATENTED IMAGE RETRIEVAL METHOD. [3]. INNOVATIVE VISIBILITY ENHANCEMENT FOR POOR QUALITY IMAGES IN INCLEMENT DUSTY WEATHER.

	Singapore.		
No. of Conferences	National	Attended	Organized
		02	--
	International	05	01
Research Guidance	Awarded	UG	PG
		18	03
	Undergoing	02	01
Research Projects	Completed	--	
	Undergoing	--	
Awards & Distinctions	--		
Administrative Assignments Handled	OiC Institute Guest House Institute Associate Proctor Warden and Assistant Warden Officer in charge DSP Lab EAP (TEQIP-III) Coordinator		
Association with Professional Bodies	ISTE [Member Id.No:LM 89651] IEEE [Member Id.No: 94808768]		
Any other Achievements			