

RESUME

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Area of Interest: Signal and Image Processing, Artificial Intelligence and Machine Learning, AI in Healthcare.

Academic Qualifications:

Examination	Year of Passing	Specialization	Name of Institute
B.E	1999	Electronics And Communication Engineering	G.B Pant Institute of Engineering and Technology, Pauri Garhwal Uttarakhand, India
M.E	2002	Control And Instrumentation	MNNIT, Allahabad. U.P, India (Formerly MNREC–Allahabad)
Ph. D	2014	Biomedical Signal Processing	IIT Roorkee. Uttarakhand, India

Professional Experience:

S. No.	Designation	Name and Address of the Employer	Pay Scale	Period of Employment	
				From	To
1.	ASST.PROF	GBPEC, PAURI	15600-39100 (AGP-6000)	18/05/2005	17/05/2010
2.	ASST.PROF	GBPEC, PAURI	15600-39100 (AGP-7000)	18/05/2010	17/05/2015
3.	ASST.PROF	GBPEC, PAURI	15600-39100 (AGP-8000)	18/05/2015	17/05/2018
4.	ASSOCIATE PROFESSOR	GBPIET, PAURI	37400-67000 (AGP-9000)	18/05/2018	17/05/2021
5.	PROFESSOR	GBPIET, PAURI	37400-67000 (AGP-10000)	18/05/2021	28/07/2026
6.	PROFESSOR	HBTU KANPUR	-	29/07/2026	Till date

Training Courses (STC/FDP) Attended:

S.N.	Program	Duration	Organized by
1.	Bioinformatics, Big Data and Drug Discovery-Prospect and Challenges	14/09/2020- 24/09/2020	GBPIET PAURI
2.	Block Chain and its application	20/07/2020-24/07/2020	GBPIET PAURI
3.	International FDP on Recent Trends in Computer Science and IT	13/07/2020-17/07/2020	RKGIT Ghaziabad, U.P
4.	Exposure & Rejuvenation of Technology in Changed Era of the World	06/07/2020-10/07/2020	RKGIT Ghaziabad, U.P
5.	Challenges in development of Innovative product in India	04/07/2020-04/07/2020	ATAL Incubation HUB, HBTU Kanpur
6.	Short Term Course(STC) on “Recent Trends in Renewable Energy,”	26/11/2019- 30/11/2019	GBPIET, PAURI
7.	FPGA and Mentor Graphics Tools	10/10/2019-14/10-2019	GBPIET PAURI
8.	Good Governance	10/06/2019- 11/06/2019	SPIU Uttarakhand
9.	Adobe Disha Digital Program	09/05/2018-10/05/2018	GBPIET-PAURI TEQIP-III
10.	Smart Grid Technology and its applications-III	10/09/2018-14/09/2018	GBPIET TEQIP
11.	Active Learning, Autonomy, Academic Governance and R&D	02/07/2018-06/07/2018	IIT Roorkee GBPIET TEQIP
12.	Modeling and Simulation of Advanced Semiconductor Devices & VLSI circuit	26/06/2018-29/06/2018	GBPIET, TEQIP
13.	Digital Image Processing and Its Applications	One week	GBPEC, TEQIP
14.	Smart Grid Technology and its applications	One week	GBPEC, TEQIP
15.	Advancements in cloud computing	One week	GBPEC, TEQIP
16.	Advanced Materials and Instrumentation in Biomedical Engineering	One week	IIIT Allahabad
17.	Smart Grid Technology	One week	GBPEC, TEQIP
18.	Pedagogical Training for Engineering Faculties	One week	Engineering Staff College of India, Hyderabad
19.	Advancements in cloud computing	One week	G.B Pant Engineering College Pauri-Garhwal

20.	Academic Management for Achieving Excellence in Engineering Education	Two Days	Engineering Staff College of India, Hyderabad
21.	Energy Resources	One week	Indian Institute of Technology Roorkee
22.	Soft Computing and Image Processing	One week	Indian Institute of Technology , Roorkee
23.	Digital Signal Processing and MATLAB	One week	Indian Institute of Technology , Roorkee
24.	Biomedical Signal Analysis	One week	Indian Institute of Technology , Roorkee
25.	Image processing and computer graphics for scientific visualization	One week	Indian Institute of Technology, Roorkee
26.	Medical Signal and Image processing	01 day	Indian Institute of Technology, Roorkee
27.	Ultrasound Image Processing and Clinical Application	03 days	Indian Institute of Technology, Roorkee
28.	Bio Medical Signal Processing	One week	Indian Institute of Technology , Roorkee
29.	Digital Electronics	One week	Indian Institute of Technology, Roorkee,
30.	MATLAB Programming	One week	National Institute of Technical Teachers' Training and Research, Chandigarh.
31.	Blue Print for Success	03 days	Qualified Learning Systems Co. Inc (USA)
32.	DSP Tools and Practice	One week	Indian Institute of Technology, Kharagpur
33.	SUSE Linux Fundamental	One week	Novel Education Certificate Technical Solution Pvt. Ltd
34.	Virtual Instrumentation and Digital System Design.	03 days	National Institute of Technology Kurukshetra

Publications:

International journal:

1. Gautam, K., Kumar, Y., Sonawane, S., & Kumar, S. (2025). Electrochemical treatment of wastewater containing reactive Blue 4 (RB 4) dye: RSM and ANN optimization, techno economic analysis and sludge characterization. Cleaner Chemical Engineering, 11, 100138.

2. Rawat, S. S., Verma, S. K., & Kumar, Y. (2024). Infrared small target detection based on Bi-Nuclear norm minimization. *Multimedia Tools and Applications*, 83(12), 34111-34135.
3. Nainwal, A., Kumar, Y., & Jha, B. (2022). An ECG classification using DNN classifier with modified pigeon inspired optimizer. *Multimedia Tools and Applications*, 81(7), 9131-9150.
4. Nainwal, A., Kumar, Y., & Jha, B. (2022). Arrhythmia classification based on improved monarch butterfly optimization algorithm. *Journal of King Saud University-Computer and Information Sciences*, 34(8), 5100-5109.
5. Malik, G. K., Yatindra, K., & Manoj, P. K. (2022). Multiclass arrhythmia classification based on support vector machine optimized by grasshopper optimization algorithm. *Indian J. Comput. Sci. Eng*, 13(2), 525-535.
6. Malik, Gorav Kumar, Yatindra Kumar, and Manoj Panda (2022) "Reduced Features with RBF-SVM for Diagnosing Multiclass Arrhythmia." *International Journal of Mechanical Engineering*, Kalahari Journals, 2022.Vol. 7 (Special Issue, Jan.-Feb. 2022), 291-298.
7. Rawat, S. S., Verma, S. K., Kumar, Y., & Kumar, G. (2021). Infrared small target detection based on non-convex Lp-norm minimization. *J. MESA*, 12(4), 929-942.
8. Sur Singh Rawata, *, Sashi Kant Vermab and Yatindra Kumar,(2021)"Infrared small target detection based on non-convex triple tensor factorization", *IET Image Processing*, Vol.15, Issue 2, pp.556-570, 2021
9. Sur Singh Rawata, *, Sashi Kant Vermab and Yatindra Kumar, (2020) "Reweighted infrared patch image model for small target detection based on non-convex L_p -norm minimisation and TV regularisation", *IET Image Processing*, Vol. 14, Issue 9 pp.,1937–1947, 2020
10. Sur Singh Rawata, *, Sashi Kant Vermab and Yatindra Kumar (2020)"Review on recent development in infrared small target detection algorithms" *Procedia Computer Science* Vol. 167, pp.,2496–2505, 2020.(Elsevier)
11. PapendraKumar,H. S. Bhadauriya, Agya Ram Verma&Yatindra Kumar (2020), "Design Spline Adaptive Filter with Fractional Order Adaptive Technique for ECG Signal Enhancement" *Augment Hum Res* Vol.5 Issue-4, pp.1-9, 2020(Springer)

12. Ashish Nainwal, Yatindra Kumar, BholaJha(2019) "ECG Arrhythmia Classification Algorithms"International Journal of Recent Technology and Engineering (IJRTE)Volume-8 Issue-3, pp.6667-6674, 2019.
13. S. Negi, Y.Kumar, and V.M Mishra(2018),"Myoelectric control of upper limb prostheses using LDA and MLPNN with back propagation algorithm" International Journal of Computational System Engineering, vol.4, no.2-3, pp.120-126, 2018. (Inderscience)
14. A. Nainwal, Y. Kumar, and B. Jha(2018), "Comparative study of LV Q and BPN ECG Classifier" International Journal of Computational System Engineering, vol.4, no.2-3, pp.140-145, 2018. (Inderscience)
15. Ashish Nainwal, Yatindra Kumar, BholaJha (2017) "Comparative Study of Tachyarrhythmia ECG and Normal ECG" Annals of Computer Science and Information Systems, vol.10, pp. 63-65, 2017.
16. Gorav Kumar Malik, Yatindra Kumar, Manoj Panda(2017) "Cardiac arrhythmia detection in ECG signals by feature Extraction and support vector machine" Annals of Computer Science and Information Systems, vol.10, pp. 241-244, 2017.
17. SachinNegi, Yatindra Kumar, V. M. Mishra, "MLPNN and kNN "Based Classification of sEMG Signal for Myoelectric Control of Upper Limb Prosthesis (2017)" Annals of Computer Science and Information Systems, vol. 10,pp. 269-272, 2017.
18. Yatindra Kumar, M.L Dewal, R.S Anand (2014), "Epileptic Seizure Detection using DWT Based Fuzzy Approximate Entropy and Support Vector Machine", Neurocomputing, vol. 133, pp. 271-279, 2014.(Elsevier)
19. Yatindra Kumar, M.L Dewal, R.S Anand (2013), "Relative Wavelet Energy and Wavelet Entropy Based Epileptic Brain Signals Classification," Biomedical Engineering letters, vol.2 no.3, pp.147-157, 2013.(Springer)
20. Yatindra Kumar, M.L Dewal (2013), "Complexity Measures for Normal and Epileptic EEG Signals using ApEn, SampEn and SEN," International Journal of Computer & Communication Technology, vol.4, no.2, pp. 95-101, 2013.
21. Yatindra Kumar, M.L Dewal, R.S Anand (2011), "Epileptic seizures detection in EEG using DWT-based ApEn and artificial neural network," Signal Image and Video Processing, vol. 7, pp.1-12, 2011.(Springer)
22. Yatindra Kumar, Gorav K. Malik(2010), "Performance analysis of different filters for powerline interface reduction in ECG signal" International Journal of Computer Applications, vol.3, no.7, pp.1-6, 2010

International Conference:

23. Dhoundiyal, P., Kumar, Y., Negi, S., & Barthwal, A. (2022, September). Fault detection and classification in solar photovoltaic array. In 2022 IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT)23rd to 25th September 2022 (pp. 1-6). IEEE.
24. S. Kumar and Y. Kumar K Gautam, S. Kamsonliana. (2022), Electrochemical Treatment of Wastewater containing Rective Blue 4 (RB 4) Dye by using Airlift Electrocoagulation and Optimization of Multivariate Parameters, International Conference on “Technological Interventions for Sustainability (Chem-Conflux22), April 14-16, 2022, MNNIT Allahabad.
25. Rawat, S. S., Verma, S. K., & Kumar, Y. (2021, March). Infrared Small Target Detection Based on Phase Fourier Spectrum Transform. In International Conference on Communication, Computing and Electronics Systems: Proceedings of ICCCES 2020 (pp. 693-701). Singapore: Springer Singapore.
26. Nainwal, A., Kumar, Y., & Jha, B. (2020). ECG Classification Using DNN and GA Optimized Algorithm. In Proceedings of Integrated Intelligence Enable Networks and Computing: IIENC 2020 (pp. 521-527). Singapore: Springer Singapore.
27. Gorav K. Malik, Yatindra Kumar, M.K Panda (2020), “Multi-kernel SVM approach for arrhythmias classification” 1st International Conference on Integrated Intelligence Enable Networks & Computing (IIENC-2020), I.T Gopewar, 05-07 Sep 2020.
28. S. Negi, Y.Kumar, and V.M Mishra (2016), "Feature Extraction and classification for EMG Signals using LDA," in IEEE International Conference on Advances in Computing Communication and Automation (ICACCA-2016), Bareilly, 08-09 Apr - 2016, pp. 1-6.
29. A. Nainwal, Y. Kumar, and B. Jha(2016), " Morphological Changes in Congestive Heart Failure ECG," in IEEE International Conference on International Conference on Advances in Computing, Communication and Automation (ICACCA-2016), Bareilly, 08 Apr - 09 Apr 2016, pp. 1-6.
30. Y. Kumar, M. Dewal, and R. Anand (2013), "Wavelet entropy based EEG analysis for seizure detection," in IEEE International Conference on Signal Processing, Computing and Control (ISPCC-2013),J.P Solan, 26-28 Sep 2013, pp. 1-6.
31. Yatindra Kumar, M.L Dewal, R.S Anand(2012), “Feature Extraction of EEG Signals using Approximate and Sample Entropy,” IEEE Student’s Conference on Electrical,

Electronics and Computer Science (SCEESC-2012) Bhopal, India, 1-2 Mar, 2012, pp, 1-5.

32. Yatindra Kumar, M.L Dewal(2011), “Complexity Measures for Normal and Epileptic EEG Signals using ApEn, SampEn and SEN,” In International Conference on Computer Science and Informatics(ICCSI-2001) at Bhubaneswar, June,19-20, 2011, pp.6-12. **(Best Paper Awarded)**

Book Chapter

33. Jha, B., Panda, M. K., & Kumar, Y. (2022). Online-based approach for frequency control of microgrid using biologically inspired intelligent controller. In Sustainable Developments by Artificial Intelligence and Machine Learning for Renewable Energies (pp. 131-148). Elsevier.
34. Rawat, S. S., Verma, S. K., & Kumar, Y. (2021). Infrared Small Target Detection Based on Fractional Directional Derivative and Phase Fourier Spectrum Transform. In Data Intelligence and Cognitive Informatics: Proceedings of ICDICI 2020 (pp. 579-591). Singapore: Springer Singapore.

Book Published

35. Kumar, Y., Verma, S. K., Singh, A., Kumar, K., & Gupta, M. (Eds.). (2024). IoT-Enabled Healthcare Systems: Applications, Benefits, and Challenges. CRC Press.

Personal Details:

Father's Name: Sri Ramasare

Date of Birth: 15/01/1977

Nationality: Indian

Religion: Hindu

Dr. Yatindra Kumar