Rajani Katiyar

Assistant Professor

B.E (Electronics & Communication),

Educational Qualification M.Tech.(Instrumentation)

PhD (Broadband Communication)

Teaching: 20 Years

Experience

Industry: Nil

Area of Interest Communication and Signal Processing,

Email ID rajanikatiyar@rvce.edu.in

Date of Joining at RVCE: 22nd January 2008

Subjects Handled: DSPML, Mathematics for Communication, DSP, Advanced DSP, Signals Systems, VLSI DSP, Error Control Coding, Control Systems, Network Analysis, Optical Fiber Communication.

No. of Projects guided to UG Students: 18

Publication Details

International Journals:

- Katiyar, R., Kumari, U., Panagar, K., Patil, K., Manjunath, B.M., Gowda, Y.J. (2024). Object Detection and Depth Estimation Using Deep Learning. In: Garg, D., Rodrigues, J.J.P.C., Gupta, S.K., Cheng, X., Sarao, P., Patel, G.S. (eds) Advanced Computing. IACC 2023. Communications in Computer and Information Science, vol 2053. Springer, Cham. https://doi.org/10.1007/978-3-031-56700-1
- 2. Souparna Roy1, Bhanuprakash S1, Muhammad Akram A1, Rajani Katiyar1*, Uttara Kumari M"Map-based Localization for Autonomous Vehicles" RVJSTEAM, 4,2 (2023)
- Rajani Katiyar¹, K R Usha Rani¹, TS Sindhu¹, HD Sneha Jain¹, Vidhyashree V¹, S Ashoka² and Manjunatha Channegowda" Design and development of electrochemical otentiostat circuit for the sensing of toxic cadmium and lead ions in soil" Engineering Research Express, Volume 3, Number 4, Published 18 November 2021, IOP Publishing Ltd.DOI 10.1088/2631-8695/ac3637
- 4. B, Y., V, V., Mittal, A., P., H. R., & Rajani, K. (2024). Emotion Detection and Voice Emotion Conversions using Deep Learning. International Journal of Microsystems and IoT, 2(3), 685–691. https://doi.org/10.5281/zenodo.11141973
- 5. Suhas N Bhargav1 , Rajani Katiyar1* "Smart and Interactive Features for Lane Detection "VJSTEAM, 1,2 (2020

- **6.** Rajani Katiyar, Padmaja K V "Novel precoding algorithm for VDSL-2" International Journal of Engineering and Technology (IJET) Vol 9 No 5 Oct-Nov 2017. DOI: 10.21817/ijet/2017/v9i5/170905022
- 7. Katiyar, R., Padmaja, K.V." Design of equalizer for ADSL modem Indian Journal of Public Health Research and Development, 2019, 10(5), pp. 834–83

International Conferences:

- R. Katiyar et al., "Real-Time Video PLC Using In-Painting," 2024 16th International Conference on COMmunication Systems & NETworkS (COMSNETS), Bengaluru, India, 2024, pp. 153-158, doi: 10.1109/COMSNETS59351.2024.10427265.
- 2. N. S. Divyashree, R. Katiyar and V. Naik, "Test System Designing for Damping Control Unit," 2023 International Conference on the Confluence of Advancements in Robotics, Vision and Interdisciplinary Technology Management (IC-RVITM), Bangalore, India, 2023, pp. 1-5, doi: 10.1109/IC-RVITM60032.2023.10435148.
- 3. K. R. Usha Rani, R. Katiyar, C. Manjunatha, N. P. Birajadar, L. Likhita and P. K, "Heavy Metal-Ion Detection in Soil Using Anodic Stripping Voltammetry," 2020 International Conference for Emerging Technology (INCET), Belgaum, India, 2020, pp. 1-4, doi: 10.1109/INCET49848.2020.9154169
- 4. Yeshitha B, Vinitha, Harshitha, Anubha, Rajani Katiyar, "Emotion Detection and Voice motion Conversions sing Deep Learning" 3rd International Conference o3n Microelectronics Computing Systems Machine Learning and Internet of Things(MCMI-2022), Oct 2022, Ranchi .India
- 5. Chandrala M, Rajani Katiyar, "Implementation of Bootloader for Electric Two Wheelers", July 2022, 7th International Conference on Microelectronics, Computing & Communication Systems(MCCS-2022), Ranchi, India
- 6. Keerthana M, Rajani Katiyar, "E-learning Platform Customization through the Sentiment Analysis and Recommender System,". 3rd International Conference on Microelectronics Computing Systems Machine Learning and Internet of Things(MCMI-2022), Oct 2022, Ranchi, India.

Consultancy Projects:

- 1. Completed two consultancy projects in 2023 and 2024.
- 2. working on one ongoing consultancy project.