



## Rekha Sahu, Ph.D.

**Designation** : Assistant Professor

**Department** : Department of Computer Science and Engineering  
(JOINED THE INSTITUTE IN 2023)

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### RESEARCH INTERESTS

- ✓ Spiking Neural Network
- ✓ Deep Learning
- ✓ Machine Learning
- ✓ Neural Network
- ✓ Soft computing
- ✓ Game theory
- ✓ Data science
- ✓ Optimization approaches
- ✓ Image processing
- ✓ Signal processing
- ✓ Health dataset etc

### Academic Qualifications

Ph. D. (Computer Science), KIIT deemed to be University, India

M. Tech. (Computer science), Utkal University, India

### Teaching Experience/Industrial Experience/Research Experience

- ✓ 20+ years teaching experience

**JOURNAL ARTICLES & CONFERENCE PAPERS**

1. **R. Sahu**, S. R. Dash, L. A. Cacha, R. R. Poznanski, & S. Parida (2020). "Epileptic seizure detection: a comparative study between deep and traditional machine learning techniques." *Journal of Integrative Neuroscience*, 19(1), 1-9.
2. **R. Sahu**, S. R. Dash, L. A. Cacha, R. R. Poznanski, & S. Parida (2021). Classifier Implementation for Spontaneous EEG Activity during Schizophrenic Psychosis. *Computación y Sistemas*, 25(3).
3. **R. Sahu**, S. R. Dash, Sujit Das (2022). "Nurse Allocation in Hospital: Hybridization of Linear Regression, Fuzzy Set and Game-Theoretic Approaches" *Sadhana*, 47(3).
4. S.R. Dash & **R. Sahu** (2020). "Perfect Services of Nurses Provided by Hospital using Game Theory". *Journal of Information Technology Research (JITR)*, IGI Global.
5. **R. Sahu**, S. R. Dash, Sujit Das (2021). "Career selection of students using hybridized distance measure based on picture fuzzy set and rough set theory." *Decision Making: Applications in Management and Engineering*, 4(1), 104-126.
6. **R. Sahu**, P. K. Bharimalla & S. R. Dash (2020). "Resources' Planning for Cloud Computing Using Different Types of Regression Analysis." In *Smart Intelligent Computing and Applications* (pp. 419-428). Springer, Singapore.
7. S.R. Dash & **R. Sahu** (2019). "Prediction of death rate using regression analysis." In *Emerging Technologies in Data Mining and Information Security* (pp. 735-745). Springer, Singapore.
8. S. Pal, P. Das, **R. Sahu**, & S. R. Dash (2021). Study of Neuromarketing with EEG Signals and Machine Learning Techniques. *Machine Learning for Healthcare Applications*, 33-56
9. **R. Sahu**, S. R. Dash, & A. Baral, (2024). Identification of Students' Confusion in Classes from EEG Signals using Convolution Neural Network. *Informatica*, 48(1).
10. Sahu, R., & Dash, A. K. (2023, September). Identification of Malignant Cells Using Convolutional Neural Network. In *2023 1st International Conference on Circuits, Power and Intelligent Systems (CCPIS)* (pp. 01-06). IEEE.
11. **Sahu, R.**, Mohanty, K., Dash, S. R., Brahnam, S., & Barra, P. (2023, September). Prediction of Heart Attack and Death: Comparison Between 1 DCNN and Conventional ML Approaches. In *2023 1st International Conference on Circuits, Power and Intelligent Systems (CCPIS)* (pp. 1-6). IEEE.

ANY OTHER

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## Book Chapter

1. **R. Sahu**, & S. R. Dash (2023). Detection of Brain Abnormalities from Spontaneous Electro encephalography Using Spiking Neural Network. In Intelligent Technologies : Concepts, Applications, and Future Directions, Volume 2 (pp. 123-143). Singapore : Springer Nature Singapore.