Faculty Profile

Name: **Dr. Sudeshna Sani**

Designation: **Assistant Professor**

Teaching Areas: Computer Programming, Artificial Intelligence, Machine Learning, Deep Learning, Data Science, Data Analytics, Web Development.

Research Interests: Neural Network, Natural Language Processing, Low Resource Language Machine Translation, Image Processing.

Education:

- PhD (Pursuing), KL University, Vijayawada, 2022
- M. Tech (CSE), WBUT, West Bengal, 2019
- AMIE (CSE), IEI, Kolkata, 2017
- Diploma in CST, Calcutta Technical School, Kolkata, 2005

Research / Selected Publications:

1. Sani, Sudeshna, Samudra Vijaya, and Suryakanth V Gangashetty. "A Survey on the MT Methods for Indian Languages: MT Challenges, Availability, and Production of Parallel Corpora, Government Policies and Research Directions." *International Journal of Computing and Digital Systems* 15.1 (2024): 1513-1525. DOI: 10.12785/ijcds/1501107
2. Sani, S., Bera, A., Mitra, D., & Das, K. M. (2022). COVID-19 Detection Using Chest X-Ray Images Based on Deep Learning. International Journal of Software Science and Computational Intelligence (IJSSCI), 14(1), 1-12. http://doi.org/10.4018/IJSSCI.312556
3. D. Mitra and S. Gupta, "Plant Disease Identification and its Solution using Machine Learning," 2022 3rd International Conference on Intelligent Engineering and Management (ICIEM), London, United Kingdom, 2022, pp. 152-157, doi: 10.1109/ICIEM54221.2022.9853136
4. Detection of Polarity in the Native-Language Comments of Social Media Networks, Book Chapter, Artificial Intelligence and Knowledge Processing (AIKP'2022). DOI: 10.1201/9781003328414-22.

PATENTS:

1. **Title of Invention:** *"A System For Analyzing Mineral And Gas Production Using Machine Learning / Ai Interfaces".* **Application No.-202111013152; Published on 02/04/2021.**
2. **Title of Invention: "**Multimedia Management device for Television". A system of content filtering using Federated Learning. **Application Number: 202441071001;** Published on 04/10/2024
3. **Title of Invention: "**Hybrid Neural Machine Translation System Utilizing TF-IDF Weighting for Enhanced Semantic Accuracy. **Application Number: 202541037564;** Published on 05/05/2025