Faculty Forum: 4-11-2024

Ms. D. NIKHILA DEVI, Department of Computer Science

Topic: Neural Networks in Machine Learning

Ms. Nikhila explained about Neural networks which are a core component of machine learning, designed to simulate the way the human brain processes information. Composed of layers of interconnected nodes, or "neurons," these networks can identify patterns in data by learning from examples. She explained that Each neuron processes input data, applies weights, and passes it through an activation function to determine its significance. She stressed the importance of Neural networks which are particularly powerful for complex tasks like image recognition, language processing, and predictive analytics, where traditional algorithms struggle. She concluded that as they receive more data, these networks continuously adjust, improving their accuracy and making them indispensable for advancing AI applications.

