Seminar on "Deep Learning Approaches for Time Series Data Analysis"

Date: 18-03-2026
Speaker: Dr. Naba Krushna Sabat, Assistant Professor, VFSTR, Guntur, AP
Duration: One Day

1. Introduction

The seminar focused on **Deep Learning Techniques for Time Series Data Analysis**, emphasizing the importance of modern AI methods in forecasting, anomaly detection, and real-world applications.

2. Objectives

- To understand the characteristics and challenges of time series data.
- To explore deep learning architectures suitable for time series tasks.
- To demonstrate practical applications and case studies of deep learning models.

3. Seminar Highlights

- **Overview of Time Series Data:** Dr. Sabat explained the temporal patterns, trends, seasonality, and noise in time series datasets.
- **Deep Learning Techniques:** Detailed discussion on models such as **RNNs, LSTMs, GRUs, and Temporal Convolutional Networks** for prediction and anomaly detection.
- **Applications:** Case studies from finance, healthcare, and sensor data analytics were presented.
- **Practical Insights:** Tips on preprocessing, model selection, and evaluation metrics were shared to improve performance and reliability.

4. Key Takeaways

- Deep learning models significantly enhance forecasting accuracy over traditional methods for complex time series.
- Proper data preprocessing and feature engineering are critical for model success.
- Model evaluation should consider both predictive accuracy and robustness to anomalies.

5. Conclusion

The seminar was highly informative and interactive, providing attendees with both **theoretical knowledge and practical insights** into deep learning for time series analysis. It fostered discussions on innovative applications and encouraged participants to apply these techniques in research and industry projects.


(Expert Delivering Lecture)

(Felicitation of Guest)

(Group Photo of Participants along with Guest Speaker)