National Institute of Technology Rourkela

Registration Seminar

Seminar Title : Developing Efficient Session-based Recommender System Exploiting Deep Learning Techniques

Speaker : Ashok Kote (Rollno: 920cs5011)

Supervisor : Prof. Anup Nandy

Venue : New Conference Hall (CS323)
Date and Time : 28 Mar 2024 (04:15 PM)

Abstract : Session-based recommender systems play a crucial role in personalized content recommendation, especially in domains

such as e-commerce and entertainment platforms. However, accurately capturing user preferences within short-term sessions remains a challenging task. Our method leverages deep learning techniques to capture the temporal dynamics of user interactions within sessions, including sequence patterns, session context, and evolving user preferences. A multi-layer recurrent neural network (RNN) architecture with attention mechanisms to model session sequences and learn informative temporal embeddings. Furthermore, we integrate contextual information such as session context, time of day, and user behavior trends to improve recommendation accuracy and diversity. Experimental results on real-world e-commerce datasets demonstrate that our method outperforms baseline models in terms of recommendation quality, especially in capturing short-term user preferences and adapting to temporal dynamics. This research work is contributing to advancing session-based recommendation techniques by effectively leveraging temporal contextual embeddings for

 $enhanced\ personalized\ recommendations.$