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Objectives: Recommendation systems are specialized algorithms used to predict and display items a user might prefer, based on their past interactions and preferences. These systems are pivotal in various industries, especially in e-commerce and entertainment, where they help personalize user experiences and increase satisfaction. By analyzing vast amounts of data, recommendation systems can tailor content, products, or services to individual tastes, thereby driving engagement and sales. They utilize methods like collaborative filtering, content-based filtering, and machine learning to provide accurate and relevant suggestions.

Prerequisites: Machine Learning, Deep Learning, Data Mining.

Course Code: DA626

Course Name: Recommendation System Design Using Deep Learning

Credits: 3-0-0-6

Syllabus: History of Recommendation System, Matrix Factorization, Collaborative Filtering, Context-Based Filtering, Hybrids Methods, Nearest Neighbors, Graphical Neural Network, Evaluation methods of recommendation system (several families of metrics, including ones to measure prediction accuracy, rank accuracy, decision-support, and other factors such as diversity, product coverage, and serendipity). Linguistic and statistical techniques for text mining and content analysis, Semantic Web and ontologies, Semantic Recommendation systems. Ethical aspects of Recommendation systems.

Textbooks:

- To be updated.

References:

- To be updated.