Neural Network based Prediction in Recommender

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Abstract

This paper aims to contribute to the cold start problem in recommender system with Neural Network based approach. There are several attempts in academia and in the industry to improve the recommender system. For instance, latent matrix factorization is an algorithm that solves the recommendation problem, it produces efficient outcomes from the core problem. Latent factors are not directly observed but are inferred from other factors. It can be computed by assuming a specific number of such factors and then transforming the large user-item matrix into a smaller matrix based on previously assumed factors. These smaller matrices can be multiplied to reproduce a close approximation to the original user-item matrix using a technique called matrix factorization. Assuming that the matrix can be written as the product of two low-rank matrices, matrix factorization techniques seek to retrieve missing or corrupted entries. Matrix factorization approximates the matrix entries by a simple fixed-function — namely, the inner product — acting on the corresponding row and column latent feature vectors. Substituting a neural architecture for the inner product that learns from the data, improves recommendation problem and deals with the cold start problem

Biography

Karishma Nanda has her expertise in AI and passion in Neural Network. Her open and contextual evaluation creates new pathways for improving Recommender System.

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