

# Workshop Recommender Systems

• Formato do curso: Live training

• **Preço:** 935€

• **Duração:** 14 horas

Recommender Systems course is designed as a comprehensive introduction into Recommender Systems.

It needs a good understanding of Basic Machine Learning and a fair understanding of linear algebra.

## Esta formação é ministrada em Inglês.

Em parceria com a entidade acreditada:



## Pré-requisitos

• Machine Learning in Tensorflow/Keras Fundamentals

Nice to have:

- Basic Deep Learning
  - Neurons
  - Types of Layers
  - Networks
  - Loss Functions
  - o Optimizers
  - Overfitting
  - Tensorflow

## Programa

## Recommender Systems and where to find them

- Google
- Ads
- Netflix

#### **Basic Recommender Systems**

- Cosine Distance
- SVD
- SVD for recommendation system factorization

#### Hands-on Lab:

- Implement Singular Value Decomposition
- Understand how it affects the Cosine Distance

#### **Candidate Generation**

- Content Based Filtering
- Collaborative Filtering
- Matrix Factorization

Hands-on Lab: Use the studied matrix factorization techniques to implement a basic recommendation system and benchmark the factorization methods

## **Recommender using Deep Neural Networks**

- Softmax Model
- Softmax Embedding
- Embeddings for Neural Networks
- Item2Vec

Hands-on Lab: Build a recommendation system using neural networks embeddings for IMDB movies

## **Ranking**

- Retrieval
- Scoring
- Re-ranking

### Hands-on Lab:

- Learn how to improve your previous model by understanding how the movie ranking is made
- Implement your Collaborative Filtering and Hybrid Collaborative Filtering methods to make a better recommendation system

#### **Autoencoder for Recommender Systems**

- Autoencoders
- Latent Spaces
- Variational Autoencoders

**b**Build a recommendation system for retail stores using Autoencoders