Personalization and Recommendation of Upcoming Sport Events

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Media Futures

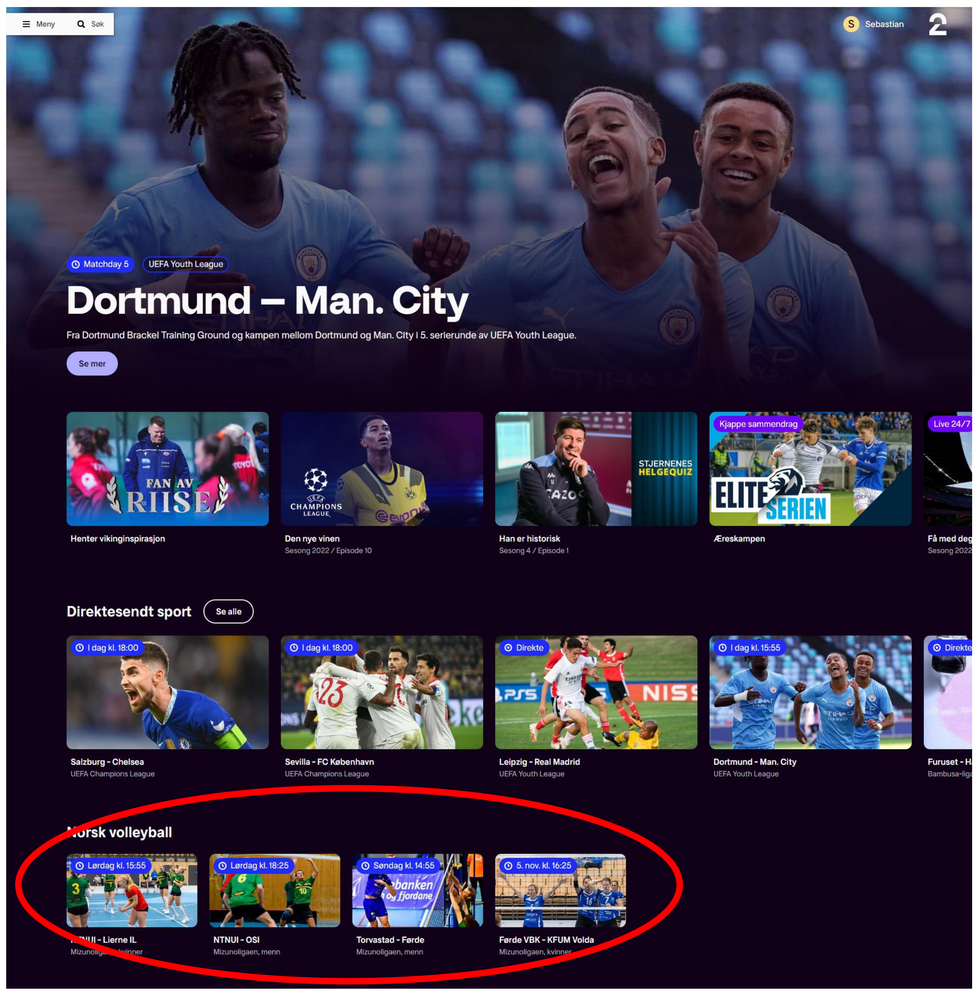

Figure 1. An example of a row that could be personalized on TV2's Sport page.

Abstract

Content recommendation for online consumers in modern media sites is becoming more and more popular. This can create great business value for the providers, as well as making it easier for consumers to discover relevant content.

While there has been done a lot of research within the field of recommendation for Video On Demand (VoD), the domain of recommendation for upcoming linear TV programs or events is often neglected. This also applies to the recommendation of relevant sports events to users, where sport, team, tournament etc., is crucial for the interest of the user.

Research question

RQ1. What are the most effective recommendation and personalization techniques in the sport domain?
RQ2. Should we always recommend the favorite team and sport, or go beyond and do cross sport recommendation?
RQ3. Which techniques based on unsupervised learning can be better suited to the task of favorite sport prediction?

The distinct characteristics of live sport events do however come with some challenges when making recommendations. Events are scheduled at a certain time on one specific channel, making conventional preference-based recommender systems unsuitable for the task. Because of this schedule, all items are not available at the same time, having only a specific set of available items to recommend at a given time. Users will also only be able to watch one channel at the time, having to choose just one and potentially give on up for another.

Method

In this thesis I will, in collaboration with TV2, aim to explore different ways to personalize the recommendation of upcoming sports events to users.

The first stage is a extensive explorative analysis, where I go into depth of the existing data. Currently I don't have any labels for the data, meaning that I only focus on unsupervised learning. The exploration involves, among other things, different ways of identifying the users in clusters, as well as identifying each users favourite sport, tournament and club.

The next stage will be to create baseline models and compare them, before potentially deploying one of them on Tv2 Play's web site for AB testing.

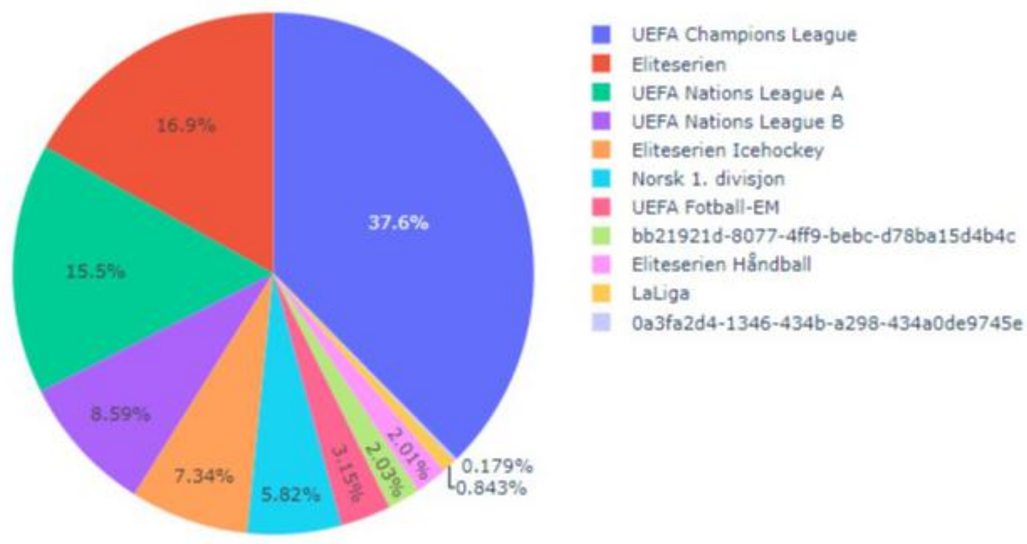

Figure 2. Favorite tournaments of the users, computed based on majority vote technique

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