Preface

The 2011 ECML-PKDD Discovery Challenge deals with the learning problems from the domain of recommender systems. Datasets and problems designed by the organizers of this Challenge, originate from the VideoLectures.Net site, a free and open access multimedia repository of video lectures, mainly of research and educational character. The lectures are given by distinguished scholars and scientists at the most important and prominent events like conferences, summer schools, workshops and science promotional events from many fields of science. The Challenge was organized with multiple aims in mind: to improve the current websites recommender system, discover new algorithms or computational workflows and provide new dataset for the research community. It encompassed two tasks: first one related to new-user/new-item recommendation problem, and the second task in which "normal mode", click-stream based recommendation is simulated. Dataset for the challenge is somewhat specific as it does not include any explicit nor implicit user preference data. Instead, implicit profiles embodied in viewing sequences have been transformed into a graph of lecture co-viewing frequencies and pooled viewing sequences. The data also includes content related information: topic taxonomy, lecture titles, descriptions and slide titles, authors' data, institutions, lecture events and timestamps. The dataset (including the leaderboard and the test set) will remain publicly available for experimentation after the end of the challenge.

Over 300 teams registered for the challenge, resulting in more than 2000 submitted results for the evaluation from 62/22 active teams for task 1 and task 2, respectively. The teams approached the tasks with diverse algorithms and in several cases novel feature construction approaches. The following are the winners of the challenge:

Task 1 Cold-start problem:

- Alexander Dýakonov (1st place)
- Eleftherios Spyromitros-Xioufis, Emmanouela Stachtiari, Grigorios Tsoumakas, and Ioannis Vlahavas (2nd place)
- Martin Možina, Aleksander Sadikov, and Ivan Bratko (3rd place)

Task 2 Pooled sequence recommendation:

- Alexander Dýakonov (1st place)
- Javier Kreiner (2nd place)
- Vladimir Nikulin (3rd place)

The Discovery Challenge workshop at the ECML-PKDD 20011 conference in Athens is aimed for discussion of the results, approaches, VL.net dataset and lecture recommendation setting in general. We wish to express our gratitude to:

- the participants of the challenge,

- the authors of the submitted papers,

- Viidea Ltd for disclosing the data on video lectures and for the technical support

Zagreb
August 2011

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