

Homework Assignment 3

(100 points)

Assigned Date: Thursday Feb 25, 2016

Due Date:

Intermediate report (30% of total): 4:00 PM Thursday March 3, 2016

Final Submission (70% of total): 4:00 Thursday March 10, 2016

Educational Goal

Become familiar with real-world data mining applications.

Requirements

KDD 2010 Cup Challenge “asks you to predict student performance on mathematical problems from logs of student interaction with Intelligent Tutoring Systems. This task presents interesting technical challenges, has practical importance, and is scientifically interesting.” In this homework, you will work with your team to discuss the work done by one of the following teams:

1. National Taiwan University, Rank 1, Feature Engineering and Classifier Ensemble for KDD Cup 2010,
<http://pslcdatashop.org/KDDCup/workshop/papers/kdd2010ntu.pdf>
2. BigChaos@KDD, Rank 3, Collaborative Filtering Applied to Educational Data Mining,
[http://pslcdatashop.org/KDDCup/workshop/papers/KDDCup2010 Toeschel_Jahrer.pdf](http://pslcdatashop.org/KDDCup/workshop/papers/KDDCup2010_Toeschel_Jahrer.pdf)

Prepare a 30-minute presentation in PPT, to **clearly and accurately discuss the method and experimental results of the KDD 2010 Cup Challenge** presented by the research paper. The instructor and TA will provide their feedback for your

intermediate report to help you to improve your final submission. **Two best teams will be invited to present in the class.**

Submission Requirements

1. **Intermediate report (one submission per team):** Prepare PPT slides (saved as a PDF file) and submit the file to UMassOnline.
2. **Final report (one submission per team):** Prepare PPT slides (saved as a PDF file). The report should present the research paper and discuss the changes have been done based on the feedback from the Instructor and the TA.
3. No hard copies are required for this homework.