STAT3009 Recommender Systems

Leco: Course Information

by Ben Dai (The Chinese University of Hong Kong)
on Department of Statistics

» Key features

- * New topic
 - RS was raised by industry around 2000, we will cover methods from 2010 to now.
- * Hybrid: interdisciplinary + teaching mode
 - * Interdisciplinary: Statistics (STAT) + Machine Learning (ML) + Python Programming + Mathematics (MATH)
 - Teaching mode: lecture slides + real time competitions in Kaggle + executable Jupyter notebook

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- * Useful: RS are almost everywhere
 - * e-commerce + retail + media + finance + health care
- Very different with other STAT courses
 - * Intensive workload for programming
 - * Good math background is better, but far from enough

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» Grading policy

- * Homework (15%)
- Inclass Kaggle Competition (Open-book InClass Kaggle Competition) (50%)
- * Final InClass Quiz (coding and exercise) (35%):
 Basic Python programming and implementation of recommender systems models (during the final lecture of the semester)

» Preparation

- * Kaggle
 - * Data competition platform
- * Colab
 - * Online Python computing platform
 - * Jupyter notebook
 - $\ast\,$ By adding "!" to use it as a terminal

» Preparation

- * Python package installation
 - * All packages will be installed under a virtual environment
 - * Using pip in terminal
 - * \$ pip install <package name>
 - * Basic packages: numpy + pandas + seaborn + scipy + scikit-learn
- * Jupyter notebook
 - create and share documents that contain live code, equations, visualizations and narrative text
 - * Install packages in Jupyter notebook via !pip install <package name>

» To-do list

- Explore Colab and Kaggle
- ☐ Participate one competition in **Kaggle**, and try to make a submission
- □ Install "numpy", "pandas", "seaborn" in your colab
- ☐ Initialize a Jupyter notebook, load "numpy", print the numpy version in your notebook

Thank you!