Summary and outlook
Agenda

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  - Outlook
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Summary

- **Recommender systems have their roots in various research areas, such as**
  - information retrieval,
  - information filtering, and
  - text classification.

- **Recommender systems apply methods from different fields, such as**
  - machine learning,
  - data mining, and
  - knowledge-based systems.

- **Addressed main topics**
  - Basic recommendation algorithms
  - Knowledge-based and hybrid approaches
  - Evaluation of recommender systems and their business value
  - Recent research topics
Outlook on the next-generation recommenders (1)

- **Improved collaborative filtering techniques**
  - Use more data sources such as tagging data, demographic information, and time data
  - Combine different techniques (predictors)
  - Automatic fine-tuning of parameters

- **More scalable and more accurate algorithms**
  - Netflix Prize competition ([www.netflixprize.com](http://www.netflixprize.com)) gave CF research an additional boost

- **Multicriteria recommender systems**
  - Exploiting multicriteria ratings containing contextual information as an additional source of knowledge for improving the accuracy

- **Context awareness**
  - Taking time aspects, geographical location and additional context aspects of the user into account
  - Emotional context ("I fell in love with a boy. I want to watch a romantic movie.")

- **Group recommendations**
  - Accompanying persons? ("Recommendations for a couple or for friends?")
Outlook on the next-generation recommenders (2)

- Better explanations that change the way the user interface works
- More elaborate user interaction models
  - Natural language processing techniques,
  - dialog-based systems for interactive preference, and
  - multimodal and multimedia-enhanced rich interfaces
  - are important steps in the transition between classical recommender systems and *virtual advisors*.
- Recommendation techniques will merge into other research fields
  - User modeling
  - Personalized reasoning
- ...
Credits

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Thank you for your attention!

Questions?

ACM RecSys
Recommender Systems
http://recsys.acm.org

ACM SIGIR
Information Retrieval
http://www.sigir.org

ACM SIGKDD
Knowledge Discovery and Data Mining
www.sigkdd.org

IUI
Intelligent User Interfaces
http://iuiconf.org

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Recommender Systems –
An Introduction
by

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