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# Recommender Systems for Social Tagging Systems

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# Preface

Social tagging systems are Web 2.0 applications that promote user participation through facilitated content sharing and annotation of that content with freely chosen keywords, called *tags*. Despite the potential of social tagging to improve organization and sharing of content, without efficient tools for content filtering and search, users are prone to suffer from information overload as more and more users, content, and tags become available on-line. Recommender systems are among the best known techniques for helping users to filter out and discover relevant information in large datasets. However, social tagging systems put forward new challenges for recommender systems since – differently from the standard recommender setting where users are mainly interested in content – in social tagging systems users may additionally be interested in finding tags and even other users.

The goal of this book is to bring together important research in a new family of recommender systems aimed at serving social tagging systems. While by no means exhaustive, the chapters introduce a wide variety of recent approaches, from the most basic to the state-of-the-art, for providing recommendations in social tagging systems. The focus is on tag recommendations and tag-aware recommendations, which are the prevalent recommendation tasks in the literature and real-world social tagging systems. The material covered in the book is aimed at graduate students, teachers, researchers, and practitioners in the areas of web mining, e-commerce, information retrieval, and machine learning.

The idea for this book emerged from a long history of fruitful cooperation between the authors, who have been actively contributing in many of the topics covered in this book. Many parts of the book are built on top of the authors' previous book chapter entitled *Social Tagging Recommender Systems* published in the *Recommender Systems Handbook* in 2011; which triggered the cooperation with Springer for extending it into a book.

The book is organized into three parts. Part **I** provides introductory material on social tagging systems and recommender systems. Part **II** presents a wide variety of recommendation techniques, ranging from the most basic

methods to the state-of-the-art, as well as strategies for evaluating these recommender systems. Part [III](#) provides a detailed case study on the technical aspects of deploying and evaluating recommender systems in BibSonomy, a real-world social tagging system of bookmarks and scientific references.

# Contents

## Part I Foundations

<b>1</b>	<b>Social Tagging Systems</b> .....	3
1.1	Introduction .....	3
1.2	Folksonomies .....	4
1.3	Tag Clouds .....	5
1.4	Data Representation .....	5
1.4.1	Folksonomies as Tensors .....	6
1.4.2	Folksonomies as Hypergraphs .....	6
1.5	Recommendation Tasks in STS .....	7
1.5.1	User Recommendation .....	8
1.5.2	Resource Recommendation .....	9
1.5.3	Tag Recommendation .....	9
1.6	Recommendations in Social Tagging Systems .....	10
1.6.1	BibSonomy .....	10
1.6.2	CiteULike .....	11
1.6.3	Other Systems .....	12
1.7	Notation .....	13
1.8	Further Reading .....	14
	References .....	14
<b>2</b>	<b>Recommender Systems</b> .....	17
2.1	Rating and Item Prediction .....	17
2.2	Rating Prediction as Regression Problem .....	18
2.3	Item Prediction as Ranking Problem .....	21
2.4	User and Item Attributes .....	23
2.5	New User and New Item Problems .....	24
2.6	Context-aware and Multi-Mode Recommendations .....	25
	References .....	27

**Part II Recommendation Techniques for Social Tagging Systems**

- 3 Baseline Techniques** ..... 33
  - 3.1 Constant Models ..... 33
    - 3.1.1 Tag Recommendation ..... 33
    - 3.1.2 User/Tag-aware Recommendation ..... 34
    - 3.1.3 Remarks on Complexity ..... 34
  - 3.2 Projection Matrices ..... 35
  - 3.3 Projection-based Collaborative Filtering ..... 36
    - 3.3.1 Tag Recommendations ..... 36
    - 3.3.2 Tag-aware Recommendations ..... 37
    - 3.3.3 User Recommendations ..... 38
    - 3.3.4 Remarks on Complexity ..... 39
  - 3.4 Further Reading ..... 39
  - References ..... 41
- 4 Advanced Techniques** ..... 43
  - 4.1 Factorization Models ..... 43
    - 4.1.1 Higher Order Singular Value Decomposition – HOSVD on Tensors ..... 44
    - 4.1.2 Scalable Factorization Models ..... 51
    - 4.1.3 Learning Tag Recommendation Models ..... 55
  - 4.2 Graph-based Models ..... 57
    - 4.2.1 PageRank-based Recommendations in STS ..... 57
    - 4.2.2 Relational Neighbors for Tag Recommendations ..... 60
  - 4.3 Content and Social-Based Models ..... 63
    - 4.3.1 Exploiting the Content of Resources ..... 63
    - 4.3.2 Exploiting Social Relations ..... 65
  - 4.4 Further Reading ..... 69
  - References ..... 70
- 5 Offline Evaluation** ..... 75
  - 5.1 Evaluation Metrics ..... 75
    - 5.1.1 Precision and Recall ..... 75
    - 5.1.2 Further Measures ..... 76
  - 5.2 Evaluation Protocols ..... 76
    - 5.2.1 LeavePostOut Methodology ..... 76
    - 5.2.2 Time-based Splits ..... 77
  - 5.3 Comparison of Tag Recommenders ..... 77
  - References ..... 79

**Part III Implementing Recommender Systems for Social Tagging**

- 6 Real World Social Tagging Recommender Systems** ..... 83
  - 6.1 Introduction ..... 83
  - 6.2 Challenges and Requirements ..... 85



- 6.3 The BibSonomy Social Tagging System..... 86
- 6.4 Architecture ..... 87
  - 6.4.1 Overview ..... 87
  - 6.4.2 Recommender Interface ..... 88
  - 6.4.3 Logging ..... 90
- 6.5 Recommender Implementations ..... 90
  - 6.5.1 Meta Recommender ..... 90
  - 6.5.2 Multiplexing Tag Recommender ..... 92
  - 6.5.3 Example Recommender Implementations ..... 92
- 6.6 Further Reading..... 94
- References ..... 94
  
- 7 Online Evaluation ..... 97**
  - 7.1 Evaluation Setting..... 97
    - 7.1.1 Metrics and Protocols ..... 97
    - 7.1.2 Preprocessing and Cleansing ..... 97
  - 7.2 Case Study ..... 98
    - 7.2.1 General Results ..... 98
    - 7.2.2 Influence of the ‘reload’ Button ..... 99
    - 7.2.3 Logged ‘click’ Events ..... 101
    - 7.2.4 Average F1-Measure per User ..... 102
  - 7.3 The ECML PKDD Discovery Challenge 2009 ..... 103
    - 7.3.1 Setting ..... 104
    - 7.3.2 Methods ..... 104
    - 7.3.3 Results..... 105
  - 7.4 Conclusion ..... 107
  - References ..... 108
  
- 8 Conclusions ..... 109**
  - 8.1 Summary ..... 109
  - 8.2 Discussion and Outlook ..... 110
  - References ..... 111

