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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 **??** provides introductory material on social tagging systems and recommender systems. Part **??** 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 **??** 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.

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