Foreword

I am delighted to see this new book on text and Web mining technologies edited by Min Song and Yifang Brook Wu.

Text and Web mining is a new and exciting area where information systems, computer science, and information science contribute to solve the crisis of information overload by integrating techniques and methods from data mining, machine learning, natural language processing, information retrieval, and knowledge management. This is one of the most active and exciting areas of the database research community. Researchers in areas such as statistics, visualization, artificial intelligence, and machine learning are contributing to this field. The breadth of the field makes it difficult to grasp its extraordinary progress over the last few years.

Unfortunately, there have been relatively few complete and comprehensive books on text and Web mining technologies. This book presents every important aspects of text and Web mining. One of the most impressive aspects of this book is its broad coverage of challenges and issues in text and Web mining. It presents a comprehensive discussion of the state-of-the-art in text and Web mining. In addition to providing an in-depth examination of core text and Web mining algorithms and operations, the book examines advanced pre-processing techniques, knowledge representation considerations, and visualization approaches. Finally, the book explores current real-world, mission-critical applications of text and Web mining in various fields such as bioinformatics, business intelligence, genomics research and counter-terrorism activities. The field is evolving very rapidly, but this book is a quick way to learn the basic ideas and to understand where the field is today. I found it very informative and stimulating, and I expect you will too.

Those of us who are interested in text and Web mining will benefit from this handbook. In particular, this book will serve as a best reference book for graduate level courses such as advanced topics in information systems and text/Web mining. With this new book, I believe that many others will get to share the extensive and deep insights of contributed authors on text and Web mining.

Xiaohua Hu