

## Foreword

Internet-age readers are overwhelmed by a huge mass of textual documents available in a variety of different digital formats. Hence, the capability of summarizing this wealth of information to focus the reader's attention on the most significant portions of a text, or of a document collection, is becoming a pressing need. This book provides a valuable, in-depth coverage of automated document summarization techniques (i.e., techniques that automatically produce a succinct overview of the most important concepts covered by one or more documents).

Automatic summarization may be performed by means of different techniques, based on NLP, machine learning, and data mining. The resulting summary typically contains either the most relevant sentences or the most prominent keywords in the document or in the collection. The book chapters introduce a variety of approaches to document summarization, together with methods to assess the quality of the generated summaries. They provide a thorough review of the state-of-the-art in this new and interesting text analysis domain.

Summarization techniques find application in rather diverse domains. The book covers a selection of the most relevant application domains, ranging from Web document summarization to user opinion inference in social network data. A challenging issue, covered in the book but still to be explored, is addressing the different languages in which documents are available. Several book chapters cover multilingual summarization (i.e. the capability of dealing with multiple languages by means of the same summarization technique).

*Elena Baralis*  
*Politecnico di Torino, Italy*

**Elena Baralis** has been a full professor at the Dipartimento di Automatica e Informatica of the Politecnico di Torino since January 2005. She holds a Master degree in Electrical Engineering and a Ph.D. in Computer Engineering, both from Politecnico di Torino. Her current research interests are in the field of database systems and data mining, more specifically on mining algorithms for very large databases and sensor/stream data analysis. She has published over 80 papers in international journals and conference proceedings. She has served on the program committees or as area chair of several international conferences and workshops, among which are VLDB, IEEE ICDM, ACM SAC, DaWak, ACM CIKM, and PKDD.