Preface

The history of social networks analysis is more than hundred years old, dating from around 1900, and originating mostly in the research areas of sociology. During this period, the studies of social networks analysis focused on small groups and small social networks. However, it has become harder and harder to manually analyze larger and more complex social networks, such as the World Wide Web. Therefore, strong computer ability and information technologies have become very important tools for social networks analysis and the field itself is therefore now moving from sociology to computer science.

Data Mining has claimed it could be the most suitable technique to deal with large amounts of data and therefore the subject of social networks mining has become a very popular issue in the area of computer science. Issues related to Social Networks Analysis and Mining include social networks data collection and preprocessing, social networks extraction and construction, algorithms and methods for mining social networks, visualization and representation, applications, etc.

As such, the objective of this book is to cover current, state-of-the-art, research trends in the area of social networks analysis and mining. It will be a useful reference book for academics and practitioners seeking research in this emerging area. Currently, there are few good quality books addressing this subject specifically, making this publication valuable to researchers.

The book “Social Networks Analysis and Mining: Techniques and Applications” is targeted at both academic researchers and practicing professionals in the fields of information science, engineering, computer science, statistics, management, anthropology, biology, communication studies, economics, geography, organizational studies, social psychology, and sociolinguistics, and others.

This book contains nineteen original and high quality chapters authored by leading researchers of social network analysis and mining communities as well as practitioners from social science, business and computer science. The book is organized into three sections. The first section includes four innovative chapters that give a flavor of the introduction and survey about the state-of-art of current researches in social network analysis and mining. In the second section eight chapters have been included to propose new measures, methods and techniques in social networks analysis. The last section includes seven chapters to present applications and case studies in which the techniques of social networks analysis and mining have been applied. Since the chapters are written by many researchers with different backgrounds around the world, the topics and content covered in this book provides insights which are not easily accessible otherwise.

While social networks analysis and mining clearly falls in the emerging category because of recency, it is now beginning to reach popularity and more books on this topic becomes desirable. It is hoped that this book will provide a reference to researchers, practitioners, students in both social networks analysis and social networks mining communities and others, for the benefit of more creative ideas.
We are grateful to all authors for their contributions and the referees for their vision and efforts. We would like to express our thanks to IGI Global and National University of Kaohsiung for realizing this book project.

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