Preface

With increased access to social networking tools, the development of Web 2.0, and the emergence of virtual worlds, social computing crosses cultural boundaries to join people in the digital landscape.

As the world moves closer and closer to the integration of technology into traditional social behaviors, there is a greater need for innovative research and development into the various aspects of social computing. Information Science Reference is pleased to offer a three-volume reference source on this rapidly growing discipline, in order to empower students, researchers, academicians, and practitioners with a wide-ranging understanding of the most critical areas within this field of study. This publication uncovers the growing and expanding phenomenon of human behavior, social constructs, and communication in online environments and provides the most comprehensive, in-depth, and recent coverage of all issues related to the development of cutting-edge social computing technologies. This reference work presents the latest research on social change, evolving networks, media, and interaction with technology to offer audiences a comprehensive view of the impact of social computing on the way cultures think, act, and exchange information.

This collection entitled, “Social Computing: Concepts, Methodologies, Tools, and Applications” is organized in eight (8) distinct sections, providing the most wide-ranging coverage of topics such as: 1) Fundamental Concepts and Theories; 2) Development and Design Methodologies; 3) Tools and Technologies; 4) Utilization and Application; 5) Organizational and Social Implications; 6) Managerial Impact; 7) Critical Issues; and 8) Emerging Trends. The following provides a summary of what is covered in each section of this multi-volume reference collection:

Section 1, Fundamental Concepts and Theories, serves as a foundation for this extensive reference tool by addressing crucial theories essential to the understanding of social computing. Chapters such as, “Computer-Mediated Communication Learning Environments: The Social Dimension” by Stefania Manca, as well as “Online Communities and Social Networking” by Abhijit Roy, provide foundational overviews of how individuals interact with social computing tools and the impact these tools have on shaping and influencing behavior. “Mobile Social Networks: A New Locus of Innovation” by Nina D. Ziv and “Mobile Social Networks and Services” by Lee Humphreys offer investigations into the recent emergence of mobile social networks, reviewing current trends and technologies and offering suggestions for future research. As this section continues, authors explore the many uses of social software and its implications in contributions such as “Social Software (and Web 2.0)” by Jürgen Dorn, “Self-Organization in Social Software for Learning” by Jon Dron, and “Living, Working, Teaching and Learning by Social Software” by Helen Keegan and Bernard Lisewski. These and several other foundational chapters provide a wealth of expert research on the elemental concepts and ideas which surround investigations of social computing technologies.
Section 2, **Development and Design Methodologies**, presents in-depth coverage of design and architectures to provide the reader with a comprehensive understanding of the emerging technological developments within the field of social computing. A number of contributions, including “Distributed Learning Environments and Social Software: In Search for a Framework of Design” by Sebastian Fiedler and Kai Pata, “Electronic Classroom, Electronic Community: Designing eLearning Environments to Foster Virtual Social Networks and Student Learning” by Lisa Harris, and “A Methodology for Integrating the Social Web Environment in Software Engineering Education” by Pankaj Kamthan highlight the many methods for the effective design of social software and networks that support education. With contributions from leading international researchers, this section offers developmental approaches and methodologies for social computing.

Section 3, **Tools and Technologies**, presents extensive coverage of the various tools and technologies that define and continue to redefine social computing research and implementation. This section begins with “A Modern Socio-Technical View on ERP-Systems” by Jos Benders, Ronald Batenburg, Paul Hoeken, and Roel Schouteten, which discusses a specific approach to creating socio-technical systems. This section continues with an in-depth investigation of social television, contained within the selections “In Search of Social Television” by Gunnar Harboe, “Asynchronous Communication: Fostering Social Interaction with CollaboraTV” by Brian Amento, Chris Harrison, Mukesh Nathan, and Loren Terveen, “Examining the Roles of Mobility in Social TV” by Konstantinos Chorianopoulos, and “From 2BeOn Results to New Media Challenges for Social (i)TV” by Konstantinos Chorianopoulos and Pedro Almeida. With more than a dozen additional contributions, this section provides coverage of a variety of tools and technologies under development and in use in social computing and social networking communities.

Section 4, **Utilization and Application**, describes the implementation and use of an assortment of social computing tools and technologies. Including 20 chapters such as “Social Networking Sites and Critical Language Learning” by Andy Halvorsen, “Using Social Networking to Enhance Sense of Community in E-Learning Courses” by Steve Chi-Yin Yuen and Harrison Hao Yang, “Publishing with Friends: Exploring Social Networks to Support Photo Publishing Practices” by Paula Roush and Ruth Brown, this section provides insight into the utilization of social computing tools and technologies for both personal and professional initiatives. “Social Software Use in Public Libraries” by June Abbas offers suggestions for applying social software techniques such as tagging and cataloguing in library settings. “Designing for Disaster: Social Software Use in Times of Crisis” by Liza Potts presents another interesting application of social software, illustrating the need for sociotechnical interventions in systems design. Contributions found in this section provide comprehensive coverage of the practicality and present use of social computing by organizations and individuals.

Section 5, **Organizational and Social Implications**, includes chapters discussing the impact of social computing on organizational and individual behavior, knowledge, and communication. This section begins with an examination of organizational knowledge, investigating its foundations and management in chapters such as “Managing Organizational Knowledge in the Age of Social Computing” by V. P. Kochikar, “Social Software for Bottom-Up Knowledge Networking and Community Building” by Mohamed Amine Chatti and Matthias Jarke, and “The Essence of Organizational Knowledge: A Social Epistemology Perspective” by Fei Gao. “The Usability of Social Software” by Lorna Uden and Alan Eardley argues that despite the prevalence of Web 2.0 tools and technologies, there is little research on usability evaluation. Successful virtual communication and collaboration are explored in chapters including “Building Social Relationships in a Virtual Community of Gamers” Shafiz Affendi Mohd Yusof and “Entering the Virtual Teachers’ Lounge: Social Connectedness among Professional Educators in Virtual Environments” by Randall Dunn. While these two chapters present very different applications
of virtual collaboration, they both offer definitions of virtual communities and offer depictions of how virtual environments both differ from and resemble face-to-face communities.

Section 6, Managerial Impact, presents focused coverage of social computing in the workplace. Fernando Garrigos’ chapter “Interrelationships Between Professional Virtual Communities and Social Networks, and the Importance of Virtual Communities in Creating and Sharing Knowledge” analyzes, as the title suggests, the relationship between professional virtual communities and social networks, and describes how these communities create and share knowledge. “Managing Relationships in Virtual Team Socialization,” by Shawn D. Long, Gaelle Picherit-Duthler, and Kirk W. Duthler provides an overview of the emergence of virtual teams in the workplace and explores the specific issues virtual employees must overcome in order to be efficient and productive. Also included in this section are chapters addressing topics related to social engineering attacks and enterprise social software, presenting an empirical view of managerial considerations for social computing.

Section 7, Critical Issues, addresses vital, conceptual issues related to social computing such as ethical considerations, security, and privacy. Chapters such as “Security and Privacy in Social Networks” by Barbara Carminati, Elena Ferrari, and Andrea Perego and “Emerging Cybercrime Variants in the Socio-Technical Space,” by Wilson Huang and Shun-Yung Kevin Wang tackle the difficult question of privacy and data security in online environments. In “The Emergence of Agency in Online Social Networks,” by Jillianne R. Code and Nicholas E. Zaparyniuk, the authors explores how agency emerges from social interactions, how this emergence influences the development of social networks, and the role of social software’s potential as a powerful tool for educational purposes. “Social Network Structures for Explicit, Tacit and Potential Knowledge” by Anssi Smedlund highlights the role of knowledge, asserting that it is embedded in relationships between individuals rather than possessed by these individuals. These and other chapters in this section combine to provide a review of those issues which are the subject of critical inquiry in social computing research.

The concluding section of this authoritative reference tool, Emerging Trends, highlights areas for future research within the field of social computing, while exploring new avenues for the advancement of the discipline. “Legal Issues Associated with Emerging Social Interaction Technologies” by Robert D. Sprague depicts potential legal issues that can arise from social interaction technology use, such as employee behavior online impacting the ability to get or maintain a job. Similarly, “Public Intimacy and the New Face (Book) of Surveillance; The Role of Social Media in Shaping Contemporary Dataveilance” by Lemi Baruh and Levent Soysal investigates privacy implications of sharing personal data in a public environment. Other issues, such as codes of conduct in social networking sites, are explored in chapters such as “Conceptualizing Codes of Conduct in Social Networking Communities” by Ann Dutton Ewbank, Adam G. Kay, Teresa S. Foulger, and Heather L. Carter. New opportunities for using technology to maintain a healthy social network are demonstrated in “Using Ambient Social Reminders to Stay in Touch with Friends” by Ross Shannon, Eugene Kenny, and Aaron Quigley. These and several other emerging trends and suggestions for future research can be found within the final section of this exhaustive multi-volume set.

Although the primary organization of the contents in this multi-volume work is based on its eight sections, offering a progression of coverage of the important concepts, methodologies, technologies, applications, social issues, and emerging trends, the reader can also identify specific contents by utilizing the extensive indexing system listed at the end of each volume. Furthermore to ensure that the scholar, researcher and educator have access to the entire contents of this multi volume set as well as additional coverage that could not be included in the print version of this publication, the publisher will provide unlimited multi-user electronic access to the online aggregated database of this collection for the life
of the edition, free of charge when a library purchases a print copy. This aggregated database provides far more contents than what can be included in the print version in addition to continual updates. This unlimited access, coupled with the continuous updates to the database ensures that the most current research is accessible to knowledge seekers.

The diverse and comprehensive coverage of social computing in this three-volume authoritative publication will contribute to a better understanding of all topics, research, and discoveries in this developing, significant field of study. Furthermore, the contributions included in this multi-volume collection series will be instrumental in the expansion of the body of knowledge in this enormous field, resulting in a greater understanding of the fundamental concepts and technologies while fueling the research initiatives in emerging fields. We at Information Science Reference, along with the editor of this collection and the publisher, hope that this multi-volume collection will become instrumental in the expansion of the discipline and will promote the continued growth of all aspects of social computing research.