**Title: Recommender Systems for e-Business Applications**

Recommender systems aims to recommend the most suitable *items* (products or services) to particular *users* (individuals or businesses) by predicting a user's interest in an item based on related information about the items, the users and the interactions between items and users. Developing recommender systems can reduce information overload by retrieving the most relevant information and services from a huge amount of data, thereby providing personalized services. A recommender system is also a data-driven decision support system. It uses data modeling approaches to analyze the behavior of a user and/or the behavior of other users, and then to "guess" a user's preferences and interests to products and services. It fully uses data analytics results to drive the generation of personalized recommendations to support users in making wise decisions.

Various recommender system techniques have been proposed and many sorts of recommender system applications have been developed recently for a variety of domains. This talk will address the theoretical research results of recommendation approaches, also more importantly of the practical developments in recommender systems. It will discuss the great opportunities and challenges for business and government, with recent successful developments of recommender systems. It will report up-to-date application developments of recommender system in eight main categories: e-government, e-business, e-commerce/e-shopping, e-library, e-learning, e-tourism, e-resource services and e-group activities, and summarize the related recommendation techniques used in each category. This talk will also systematically present the development of recommender systems through four dimensions: recommendation methods, recommender systems software, real-world application domains and application platforms. Some significant new topics will be given as new directions to support researchers and practical professionals in recommender system area.

**CV:**

Professor Jie Lu is the Associate Dean in Research in the Faculty of Engineering and Information Technology at the University of Technology Sydney (UTS). She is also the Director of the Decision Systems and e-Service Intelligence (DeSI) Research Laboratory in the Centre for Quantum Computation & Intelligent Systems. Her main research interests lie in the area of decision support systems, recommender systems, prediction and early warning systems, fuzzy transfer learning, concept drift and web-based e-service intelligence. She has published six research books and 400 papers in refereed journals and conference proceedings. She has won seven Australian Research Council (ARC) discovery grants and 10 other research grants in the last 15 years. She received the first UTS Research Excellent Medal for Teaching and Research Integration in 2010 and other awards. She serves as Editor-In-Chief for *Knowledge-Based Systems* (Elsevier) and Editor-In-Chief for *International Journal on Computational Intelligence Systems* (Atlantis), and has delivered many keynote speeches at international conferences.