## Advanced Analytics Seminar Series on 12/03/2012

Seminar Title: Risk Analysis, Analytics and Business Intelligence Speaker: Dr. Warwick Graco, Senior Director, ATO

Date and Time: 11:00am to 12:00pm, the 12th of March 2012 (Monday) Seminar Room: CC05.GD.03, UTS Blackfriars Campus (5 minutes walk from Tower Building CB01 of UTS) Street Address: 2-12, Blackfriars Street, Chippendale, NSW 2008 Seminar Chairman: Prof Longbing Cao (longbing.cao@uts.edu.au)

Abstract: This presentation will explain how risk analysis assists analytics and business intelligence and how in turn analytics can assist risk analysis and business intelligence. Risk analysis is important in discerning risks that can harm an organization and its activities and how the risks can be partially mitigated by the development of analytical models that identify high-risk entities in a population. These high-risk entities can then be treated using various management processes such as case management and work-item management. Analytics can also assist those who do risk analysis by segmenting a very large risk population into smaller digestible segments that can then be each risk analysed. The results of risk analysis and modelling can be presented to decision makers via the use of business intelligence products. This presentation will explain the relationships between these functions, how supervised and unsupervised learning can be employed to make them more efficient and how knowledge acquisition can be used to capture the thinking of those who do risk analysis. Specific analytical issues that will be covered include the use of clustering and other segmentation techniques, text mining, knowledge acquisition and rule-based work flows in the form of treatment strategies. This presentation will be of interest to those who want practice analytics in the workplace and those who want to develop newer and better analytical techniques that assist with the identification and management of risks.

**Short biography of the speaker:** Warwick has worked in defence, health and taxation and has been involved in information technology and analytics for over 20 years. He is currently Senior Director of Operational Analytics in the Office of the Chief Knowledge Officer at the Australian Taxation Office. He is responsible for assisting with the embedding of modelling solutions within the business of the ATO. He has a BSc from the University of New South Wales and a PhD from the University of New England Australia. His professional interests include organizational decision making and analytics.

## **Overview to This Seminar Series**

The Advanced Analytics Seminar Series presents the latest theoretical advancement and empirical experience in a broad range of interdisciplinary and business-oriented analytics fields. It covers topics related to data mining, machine learning, statistics, bioinformatics, behavior informatics, marketing analytics and multimedia analytics. It also provides a platform for the showcase of commercial products in ubiquitous advanced analytics. Speakers are invited from both academia and industry.

It opens regularly on every Friday afternoon at the garden-like UTS Blackfriars Campus. Each seminar is followed by a 30-minute afternoon tea, and then a open graduate study session teaching basic components in artificial intelligence, machine learning, data mining, business analytics and statistics.

You are warmly welcome to attend this seminar series.

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