AAI Advanced Analytics Seminar Series on 22/03/2013

Seminar Title: Knowledge Discovery for Computational Intelligence Research @ UC **Speaker:** Professor Dharmendra Sharma, Faculty of Education, Science, Technology and Mathematics, University of Canberra

Date and Time: 1:30pm to 3:00pm, the 22nd of March 2013 (Friday)

Seminar Room: UTS Blackfriars Campus Building 05 CC05.GD.03 (5 minutes walk

from the Tower Building CB01 of UTS)

Seminar Chairman: Professor Longbing Cao (longbing.cao@uts.edu.au)

Abstract: Data is crucial for computational modeling to solve complex real world problems. Data acquisition through sensors, encoding/representation as data, extraction of patterns/information/knowledge all are crucial steps in modeling. Multi-agents based architectures are investigated for knowledge discovery and modeling. The talk will summarise the KDCIR research motivated by problems from optimization, planning, training-performance modeling in elite sports (cycling), obesity/diabetes modeling, renal transplantation, stress/depression modeling, education analytics and cyber security. Knowledge discovery from brain-computer interaction has also been studied to decode and learn from brain signals to provide a multichannel interaction for human-centered applications. Outcomes from the completed projects will be presented and results from projects in progress will be summarized.

Short biography of the speaker: Prof Dharmendra Sharma is currently on a sabbatical attachment with AAI, UTS. He has been the Dean of the Faculty of Information Sciences and Engineering at the University of Canberra from 2004-2012. His research background is in the AI areas of Planning, Data Analytics and Knowledge Discovery, Predictive Modelling, Constraint Processing, Fuzzy Reasoning, Brain-Computer Interaction, Hybrid Systems and their applications to health, education, finance, security and sports. He has published over 200 research papers and has supervised to completion of over 20 higher degrees by research students. He has won several competitive research grants and recognition for his research leadership initiatives. He is a Fellow of the Australian Computer Society and a Senior Member of IEEE. His email contact is Dharmendra.Sharma@canberra.edu.au.

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. You are warmly welcome to attend this seminar series.

Jinyan Li, Seminar Coordinator, Associate Professor Advanced Analytics Institute, School of Software, Faculty of Engineering and IT University of Technology, Sydney

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