

AAI Advanced Analytics Seminar Series on 24/05/2013

Seminar Title: Adversarial Knowledge Discovery

Speaker: Prof. David Skillicorn, School of Computing, Queen's University, Canada

Date and Time: 1:30pm to 3:00pm, the 24th of May 2013 (Friday)

Seminar Room: UTS Blackfriars Campus Building 05 CC05.GD.02 (5 minutes walk from the Tower Building CB01 of UTS)

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

Abstract: In conventional knowledge discovery, models are built to maximise the fit with given data. In adversarial settings, where the interests of those doing the modeling and some of those being modeled are not aligned, maximising fit is a terrible strategy because it can be anticipated. Knowledge discovery techniques need to be built from the ground up in a different way. There are many ways for adversaries to conceal themselves, not all of which can be anticipated. It is better, therefore, to look for the meta-signals of adversaries and these are often found in places where humans cannot directly control the traces they leave: language and behaviour. I will illustrate how this plays out using deception in language and emergent structure in social networks as examples.

Short biography of the speaker: David Skillicorn is a Professor in the School of Computing at Queen's University in Canada. His undergraduate degree is from the University of Sydney and his Ph.D. from the University of Manitoba. He spent a sabbatical year at UTS between 2002 and 2003 where the first Bali bombings triggered his interest in adversarial knowledge discovery. He has since published extensively in this area, including his recent books "Understanding High-Dimensional Spaces" and "Knowledge Discovery for Counterterrorism and Law Enforcement". He has also been involved in interdisciplinary research on radicalisation, terrorism, and financial fraud. He consults for the intelligence and security arms of government in several countries, and appears frequently in the media to comment on cybersecurity and terrorism.

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

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