AAI Advanced Analytics Seminar Series on 17/09/2012

Seminar Title: Defending Complex Systems against Intentional Attacks
Speaker: Professor Gregory Levitin, Senior Expert in Israel Electric Corporation
Date and Time: 1:30pm to 2:30pm, the 17th of September 2012 (Monday)
Seminar Room: UTS Blackfriars Campus Building 05 CC05.GD.02 (5 minutes walk from the Tower Building CB01 of UTS)
Seminar Chairman: Associate Professor Wei-Chang Yeh
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Abstract: This talk presents a new research field that combines risk analysis, reliability engineering and game theory and studies the optimal defense resource distribution among different actions (protection, separation, redundancy, fake targets etc).   Unlike the classical reliability it is assumed that the attacker is strategic and can choose the optimal time, place and type of attack.   The defender tries to minimize the maximal possible damage caused by the attack. The optimal minmax defense strategies are obtained for different system structures, damage definitions and other game parameters. The theory has applications in cyber security, homeland defense and system design.

Short biography of the speaker: Gregory Levitin is a senior expert at the Israel Electric Corporation and a distinguished visiting professor at University of Electronic Science and Technology of China. His current research interests are in system reliability and defense.   In these fields he has published four books and more than 190 papers. He is chair of ESRA technical committee on System Reliability, associate editor of IEEE Transactions on Reliability and member of editorial boards of Reliability Engineering and System Safety, International Journal of Performability Engineering and Reliability and Quality Performance.

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.

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