<u>**AAI Advanced Analytics Seminar Series on 14/09/2012**</u>

Seminar Title: Machine Learning Methods for Multimodal Information Access
Speaker: Professor Stephane Marchand-Maillet, Viper group on Information Retrieval and Machine Learning, University of Geneva, Switzerland
Date and Time: 1:30pm to 3:00pm, the 14th of September 2012 (Friday)
Seminar Room: UTS Blackfriars Campus Building 05 CC05.GD.02 (5 minutes walk from the Tower Building CB01 of UTS)
Seminar Chairman: Associate Professor Jian Zhang (jian.zhang@uts.edu.au)

Abstract: Gaining an accurate and efficient access to information is critical in the context of large repositories of complex data. In this talk, we present our progress in building strategies for online-access to multimodal information. From suitable data representations based on distance measurements and allowing adaptive feature selection, we move on the construction of a learning-based multimodal information retrieval platform. In particular, we show how our approach enables late feature fusion. We then show how navigational approaches come as a necessary complement to query-driven operations. These alternative information access mechanisms call for effective information mining to capture global properties of the data population. We review our proposals for effective dimension reduction of information representation spaces as a pre-processing step to data understanding and visualization. As a complement, we finally look at mining strategies for long-term data augmentation, based on data content and usage, in view of embedding more semantics in the information access.

Short biography of the speaker: Stephane Marchand-Maillet is Associate Professor in the Department of Computer Science at University of Geneva. He holds a PhD in Applied Mathematics from Imperial College UK ('97). He is the founding leader of the Viper Research group on Information Retrieval and Machine Learning. He has authored a number of journal and conference contributions on Information Retrieval, Machine Learning, Data Mining and Multimedia processing. He was general chair of the ACM SIGIR 2010 in Geneva, CH and ACM CIVR 2009 in Santorini, GR. He is involved in a number of national and international projects, in relation to Information Access. He participates in scientific committees, including as Chair of the Technical Committee 12 of the International Association for Pattern Recognition ('Multimedia and Visual Information Systems'). http://viper.unige.ch/stephane

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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