Department of Mechanical Engineering
Faculty of Engineering

You are cordially invited to our:
Department Seminar

Topic:	**Explanation-Based Feature Construction**
Speaker:	**Dr. Lim Shiau Hong** Research Fellow Department of Mechanical Engineering, NUS
Date:	**Monday, 22 April 2013**
Time:	**11.00am to 12.00pm**
Venue:	**EA-06-02** *(map of NUS can be found at http://map.nus.edu.sg/)*

Abstract

While machine learning has been successfully applied in a large variety of domains, we have yet to achieve human-level performance in many tasks, even seemingly simple ones from a human point of view. For many tasks, it can be argued that the very stage of model or feature construction plays the biggest role in determining its success. In fact, many successful applications can be attributed to carefully crafted features based on knowledge about the target domains. This talk will present methods for incorporating approximate prior knowledge into supervised learning through automated construction of task-relevant features. The presented methods are based on ideas inspired by classical Explanation-Based Learning, which provides a principled approach to learning and generalization.

About the Speaker

Dr. Lim Shiau Hong is currently a research fellow in the Department of Mechanical Engineering at the National University of Singapore. He obtained his PhD in Computer Science from the University of Illinois at Urbana-Champaign in 2009. He then worked at the Chair for Information Technology of the University of Leoben in Austria on EU funded research projects PinView and CompLACS. His research interests are machine learning, pattern recognition and artificial intelligence.

** Admission is free. All are welcome to attend. **