

UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Friday, 5 August, 2.00pm

Carslaw 173

## **PENALISED SPLINE SUPPORT VECTOR CLASSIFIERS**

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### **Abstract**

Support vector machines are an elegant and often effective means of building a classifier. They are defined up to choice of a kernel function and some auxiliary parameters. However, for many popular kernels, support vector classifiers can suffer from poor scalability for large training sample sizes; lack of interpretability and the curse of dimensionality. This talk describes kernels based on the notion of penalised splines (from nonparametric regression) and explains how they can alleviate the aforementioned problems.

Enquiries about the Statistics Seminar should be directed to  
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