SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Fredagen den 20 maj kl. 10:00-11:00 presenterar Yingjie Cao sitt arbete "Useful Applications in Statistical Learning with Reproducing Kernel Hilbert Spaces" (15 högskolepoäng, grundnivå).

Handledare: Yishao Zhou

Plats: Sal 34, hus 5, Kräftriket

Sammanfattning: This paper presents a general reproducing kernel Hilbert Spaces (RK-HS) framework with its various applications in statistical learning area. This theory has been around for quite some time and has been widely used in nonlinear regression and classification problems. Kernel methods, which map data from low-dimensional space into higher-dimensional space (RKHS), can be transferred in many classical statistical learning algorithms. This paper can be roughly divided into two parts. In the first part, the writer attempts to take the reader from a very basic understanding of fields through Hilbert spaces, into reproducing kernel Hilbert spaces. In the second part, the writer want to show reader the abundant applications of kernel methods in statistical learning algorithms, with algorithms and real-world examples.

Alla intresserade är välkomna!