

Matrix Computations & Scientific Computing Seminar

Organizer: James Demmel & Ming Gu

Wednesday, 11:00AM–12:00Noon, 380 Soda

Oct. 16 **Ming Gu**, UC Berkeley

Fast Gaussian Process for Time Series

The Gaussian Process (GP) is a well-known non-parametric statistical tool for reliable regression and classification. However, GP is computationally expensive in general ($O(n^3)$ operations) and its usefulness is thus limited on very large data sets. In this work, we develop a linear time GP algorithm for time series regression and demonstrate its usefulness through a Change Point Detection (CPD) process to detect potential major event signals in financial price data.