A computationally efficient approach to the multivariate changepoint problem

Idris Eckley

Lancaster University
E-mail: i.eckley@lancaster.ac.uk

Abstract: "Detecting changepoints within multivariate data sequences is a challenge of increasingly growing importance, due to the increasing prevalence of data collected by systems and sensors. In recent years, several important theoretical and methodological breakthroughs have been proposed. However, the challenge of timely and accurate detection of changepoint locations remains, most notably in the setting where different variates may experience changepoints at different times. This talk will describe current work on this problem, outlining the SUBSET method and demonstrating its utility on both simulated data and data provided by an industrial collaborator.

[This is joint work with Sam Tickle and Paul Fearnhead]"