國立中央大學

統計研究所

學術演講

主 講 人:林建同助理教授(逢甲大學統計學系)

講 題:Greedy Variable Selection for High-Dimensional Cox Models

時 間:111年12月27日(星期二)上午11:00~12:00

地 點:中央大學鴻經館M429室

茶 會: <u>上午 10:30 ~ 11:00</u> 地 點: 鴻經館 510 室

ABSTRACT

Model selection for sparse high-dimensional Cox models has broad applications to contemporary biostatistics, in particular, to extracting relevant biomarkers from high-dimensional survival data. In this talk, we propose using a greedy-type algorithm, Chebyshev Greedy Algorithm (CGA), to iteratively include covariates in the aforementioned models, and show that with probability tending to one, all relevant covariates can be included in a moderate number of iterations. We also devise a high-dimensional information criterion (HDIC) to remove the redundant covariates chosen by CGA, thereby leading to selection consistency. Finally, the proposed method is illustrated using simulated data and a diffuse large B-cell lymphoma (DLBCL) dataset.

◎敬請張貼