Measures of Functional Dependence

BY QINGSONG SHAN, TONGHUI WANG, TANES WANGYONG

Department of Mathematical Sciences, New Mexico State University
Las Cruces, New Mexico, 88001, U.S.A.
Email: qingsong@nmsu.edu, twang@nmsu.edu, tanes_w@cmu.ac.th

Abstract

Functional dependence is an important relationship between random variables. To measure the strength of functional dependence, several measures will be given in this talk. Advantages, drawbacks and applicable conditions of those measures will be discussed. Then, we will introduce the corresponding estimators of those measures, and discuss their distributions.