Dimension Reduction: Algorithms and Applications

QIANG WU

Department of Mathematical Sciences, Middle Tennessee State University, USA

Email: qwu@mtsu.edu

Dimension reduction aims to explore low dimensional representation for high dimensional data. It helps promote the understanding of the data structure through visualization and enhance the predictive performance of machine learning algorithms by preventing the "curse of dimensionality." In this talk, I will present some new algorithms for supervised dimension reduction and discuss their applications in the gene expression data analysis as well as some other real world problems.