

SUN LIFE BRILLIANCE PROFESSIONAL
CHAIR IN STATISTICS

Performance of Selected Archimedian Copulas in Supervised Classification of a Multispectral Image

by Francisco N. de los Reyes

The paper presents a technique of estimation and compares the classification performance of selected Archimedian copulas in inferring the multivariate distribution of the reflectance readings using each band's univariate behavior. As an application, the output is useful in inferring with high confidence a pixel's representation of a specific land cover in the absence of ground-truth data. This is exhibited using a multispectral satellite image of UP Diliman Campus.

ROSARIO CHEW PROFESSORIAL
CHAIR IN STATISTICS

Structural Dynamic Factor Analysis for Quantitative Trendspotting

by Genelyn Ma. F. Sarte

Trendspotting simply means spotting of new trends. In the area of marketing and consumer research, it involves tracking of indicators to understand consumer behavior to have a sense of the market. While trendspotting can be done qualitatively or quantitatively, this lecture focuses on quantitative trendspotting. In particular, the discussion is centered on the use of a structural dynamic factor-analytic model, developed by Du and Kamakura (2012), which can be applied in analyzing several time series simultaneously by reducing them into a few key latent dynamic factors that isolate seasonal cyclic movements from nonseasonal, nonstationary trend lines. An illustration made by the authors using online keyword search data from Google Insights for Search will be presented. A recent modified application of the model by Ramiro (2017) using data for fastfood in the Philippines will also be shown.

This lecture is to be presented on December 13 (2:00 pm – 3:00 pm)