Visual Signal Analysis based on Semi- and Self-supervised Learning

許志仲
國立成功大學統計學系

摘要

With the rapid growth of deep learning-based applications for computer vision and image processing, several effective and efficient models such as ResNet, DenseNet, ResNeXt, and EfficientNet have been proposed to achieve SOTA performance on various tasks in a supervised learning way. However, rare studies focus on semi-supervised learning for computer vision applications. In this talk, I would like to introduce a particular semi-supervised learning strategy, called pairwise learning, to learn the common feature representation for different image processing and computer vision applications. I will show how pairwise learning is beneficial to various computer vision tasks, as well as bring some possible and potential research topics on deep pairwise learning in the future.