Contribution ID: 13 Type: Talk

## Deep Latent Low rank learning and global structure sparsity for Bigbrain super-restoration

Wednesday 22 September 2021 16:00 (15 minutes)

Low-rank-based representation learning is powerful for recovering the subspace structures in data, which has obtained an impressive performance; however, it still cannot obtain deeply hidden information due to the essence of single-layer structures. Structure and nonlocal patch similarity have been used successfully to enhance the performance of image restoration. However, these techniques can often remove textures and edges or introduce artifacts. In this article, we investigate the deep low-rank representation of images by presenting a novel strategy that can extend existing single-layer latent low-rank models into multiple layers. Technically, we propose the Deep Latent Low-rank learning and global structure sparsity for Bigbrain superrestoration to uncover deep features. Extensive results on the databases show that our framework can deliver enhanced performance over other related techniques.

**Primary authors:** ZHANG, Mingli; Dr TOUSSAINT, Paule-Joanne (McGill University); Dr EVANS, Alan C.

(Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada)

Presenter: ZHANG, Mingli

Session Classification: Contributed Talks: Neuro-Inspired AI

Track Classification: Workshop Day 1 - Sep 22: Neuro-Inspired AI