Journal club report

July 17, 2017

We discussed Tensorization and structured tensors The main idea of this paper:

This chapter propose several tensorization methods, which mainly obtained through three aspects:

- 1) Rearrangement (reshape).
- 2) Alignment of data blocks/epochs.
- 3) Data augmentation(Toeplitz and Hankel tensors).

Main discussion:

- 1) The definition and construction of Toeplitz/Hankel tensor, Convolution Tensor.
- 2) Longxi represent the blind source separation in details.
- 3) Image denoising by learning local structures, main idea is generating tensors form local blocks(patches) which are similar or closely related.