

Journal club report

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The main idea of this paper: This paper propose a tensor completion algorithm which use matrix state representation of tensor train decomposition. Main discussion:

- 1) How to choose TT-rank in algorithm. This paper set the TT-rank randomly.
- 2) algorithm : algorithm 1 is used as an initialization for U_i for the tensor completion problem, then use algorithm 2 to optimize U_i to get the original image X .
- 3) P is independent standard normal distribution.
- 4) Tensor tree decomposition report by Longzhen .
- 5) The possible work: KA+TT-tree;
- 6) Problem: seek a possible way to set the TT-rank.