

This is the code for the draft for TPAMI, “Fast Detection of Dense Subgraphs with Iterative Shrinking and Expansion”.

The Common Folder contains common codes for all experiments.

The basic SEA algorithm is in SEA.cpp (Alg. 1).

The algorithm to recover dense subgraphs from KKT points is in RecoverDenseSubgraph.cpp (Alg. 2).

The code of finding k nearest neighbors of dense subgraphs is in KNN.cpp (For Alg. 3).

The PointSetMatching folder contains all code for point set matching experiments, and it is arranged to the figures in the draft.

The MCS folder contains all code for maximum common subgraph experiments, it is also arranged to the figures in the draft.

Note that most of experiments run on the same parameters for many trials, thus, it will need a long time, although one trial for one parameter is very fast. You can modify the code to run fewer trials to quickly plot the curves. (Since it calculates the standard deviation, at least 2 trials is needed!)

You can freely test it; however, since the paper is just submitted, please don't distribute it. I will publish it on my web soon.

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