Weekly Report（11/18/16）

Progress this week:

1)Preserve the old ,but know the new.

2)Combination and Separation of Practice and Theory.Re-study *Python core programming*.For the work done before,especially project with long code and complex structure,this book played a summary role.

3)Reading the paper made me realize a problem.In the study of social networks, the gradual entry of the fanaticism of matrix operations. Attempts to solve all the problems by eigenvalues and eigenvectors of matrix.On the other hand, the study of social networks is another study of graph theory.

This seems to deviate from the pattern recognition of some of the mathematical tools.It is a question of how to add learning ability to the study of the problem.To a certain extent, the solution to the previous problem is based on the premise that the problem can be solved.

4)I trying to weigh the weight between academic and study.

Plan next week:

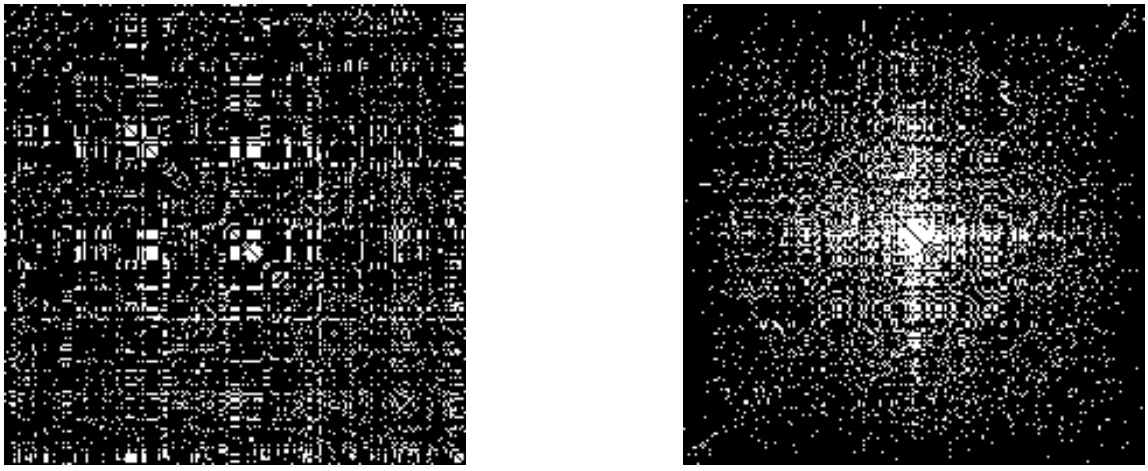
Taking into account the plan last week did not complete on time, decided to adjust it.

1)Retrieve papers on the identification of complex network.

2)Review the code for comparison.

This week's results:

Using the data sources in the paper *Toward link predictability of complex networks*,the following two pictures were obtained.



(a) Jazz for origin image

(b) Jazz for changed image

Figure 1: Image contrast

The Jazz data set is the community structure of the jazz creator. First of all, the image on the left shows the original relational network.There is not the obvious features by quickly observing.On the right hand side of the picture shows a certain

features , both the scale-free and small-world features.

In terms of personal experience,that is ,the social network in terms of ourself views.We prefer to talk combination of two basic networks, of course,taking into account the random network.After all, in life,two people acquaintance is the fate of the arrangements,but also the result of their choice.

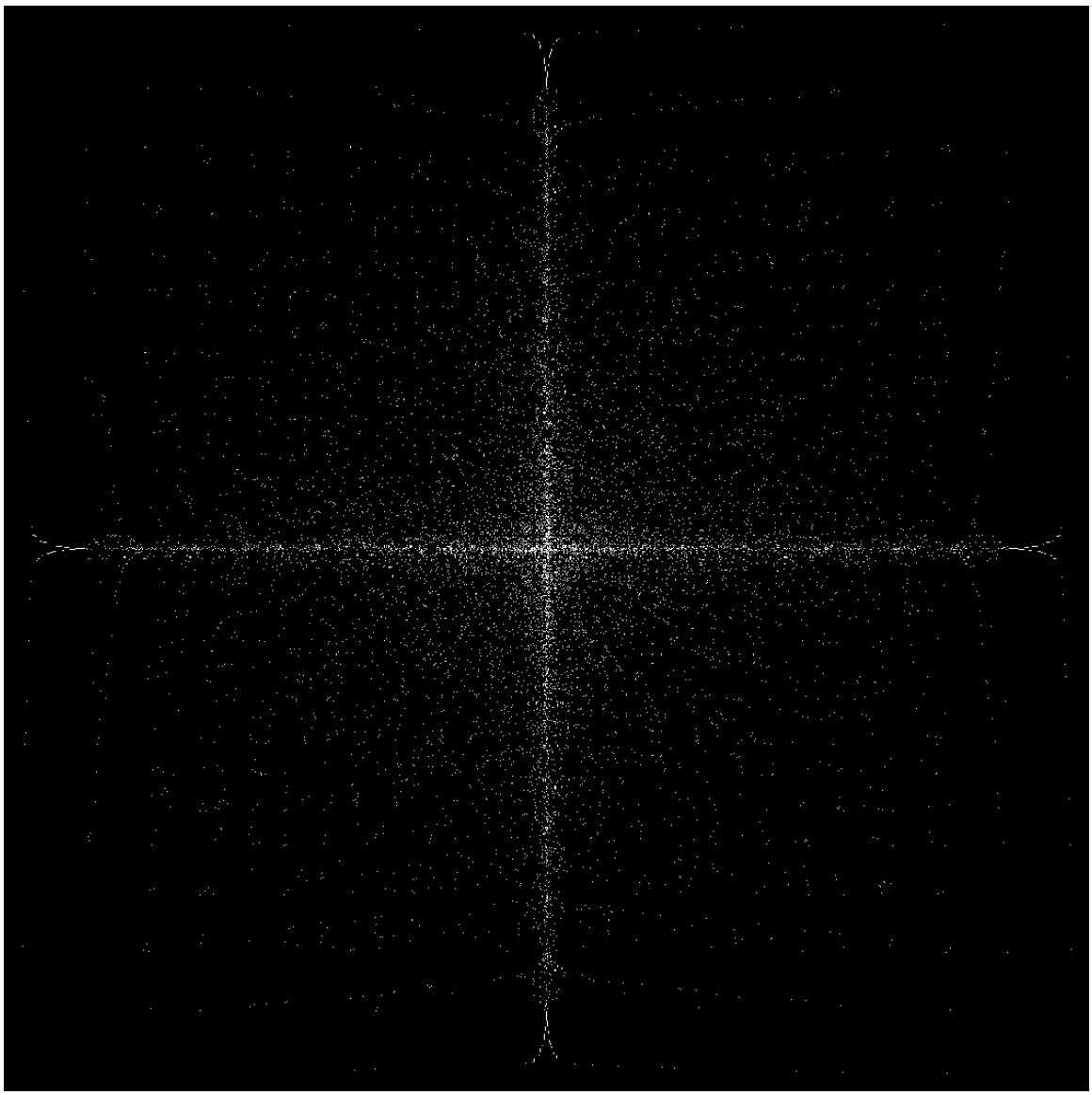


Figure 2: SmaGri Image Show

Data Set
Name:SmaGri
Nodes:1059
Edges:4922
Description:Citations to Small & Griffith and Descendants
Very perfect example. Of course, there is an example of scale-free.