extra:

 I applied few different pre-trained vectors data to compare.

The prediction accuracy of:

**crawl-300d-2M.vec**

Category top-1 top-5 top-10

game: 0.0 0.0 0.0  
position: 0.0 0.333 0.333

both ‘position’and ‘game’group’s result is so bad. That due to the dataset is so small and do not contain the relate data. What’s more, this data’s dimensions are too high that make it hard to regression. The crawl dataset’s data source is not clear and maybe have lots of irrelevant things in the dataset.

The prediction accuracy of:

**glove.6B.50d.txt**

Category top-1 top-5 top-10

game: 0.0 0.0 0.333  
position: 0.333 0.667 0.667

the ‘position’group’s result is increased but unfortunately ‘game’group is worse.

The reason is this dataset’s dimension is so small. What’s more, this data’s dimensions are similar with the original data’s dimension.

The prediction accuracy of:

**glove.6B.300d.txt**

Category top-1 top-5 top-10

game: 0.0 0.333 0.667  
position: 0.333 1.0 1.0

this result is good, the ‘position’group is increased and the ‘game’group not so bad.

That due to this dataset’s size is so large and deeply relate to my test data group, the dataset’s data source is came from wikipedia and Gigawords that relate to my test data totally.

The prediction accuracy of:

**glove.6B.100d.txt**

Category top-1 top-5 top-10

game: 0.0 0.333 0.333  
position: 0.333 1.0 1.0

this result is good, the ‘position’group is increased and the ‘game’group same as original.

That dataset’s size is not so big but due its deeply relate to my test data group its still can get increasement. What’s more , this data’s dimension is similar to the original dataset’s.

The prediction accuracy of:

**glove.twitter.27B.100d.txt**

Category top-1 top-5 top-10

game: 0.0 0.333 0.667  
position: 0.0 0.0 0.0

the ‘position’group’s result is bad due to this corpora’s context is not relate to my test data.