## Weekly Report(Up until 10<sup>th</sup> September, 2015)

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## Work Done

- 1. Last time around I was testing K-Means on only two domain proteins. I created a set of proteins having 1-5 domains and ran my script on it.
- 2. I was stitching the scattered fragments based on their sequence. Now, I tried stitching based on their distance from the centroids(as calculated by k-means).
- 3. Partially read Stella's paper.

## Results

1. The average overlap reported on testing(using stitching based on sequence) on 1-5 domain proteins is around 70-80%, but since I am experimenting with different methods to stitch the scattered fragments, this comparison is to be done for all the different methods. And only then I can come up with the best overlap score.

## **Next Steps**

- 1. Try to stitch fragments based on secondary structure information and by calculating their interaction energy with other domains.
- 2. Complete reading Stella's paper.