

Weekly Report(Up until 18th January, 2016)

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Work Done

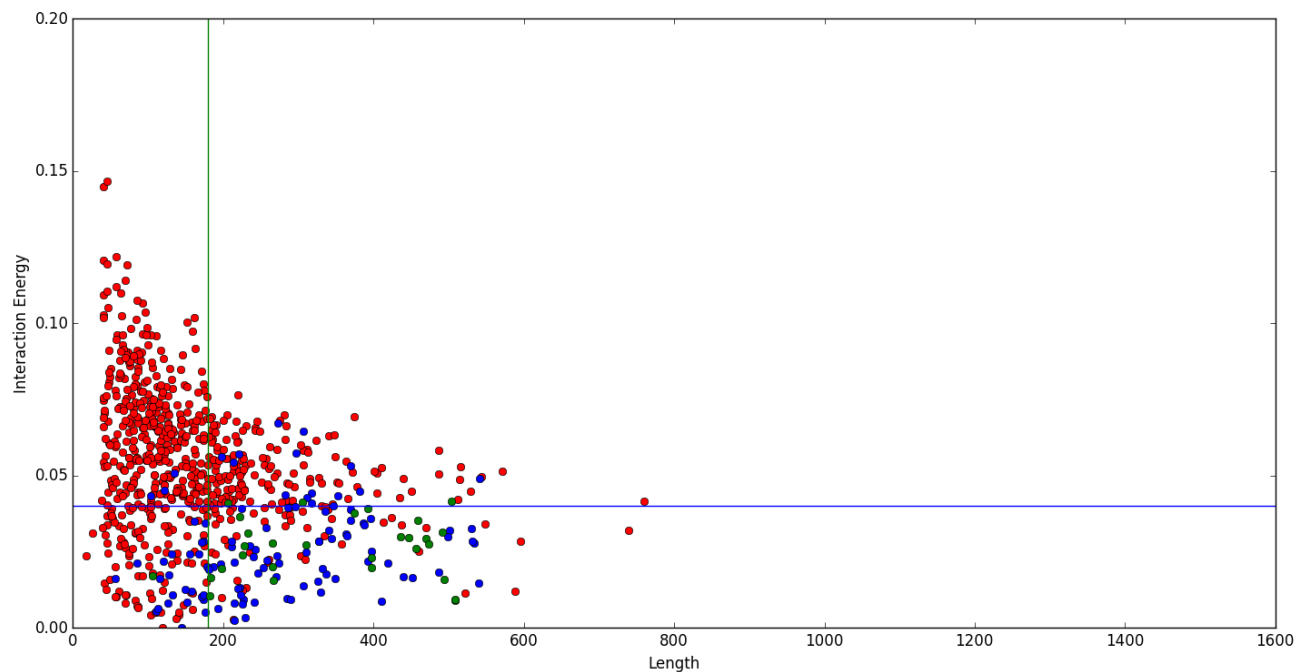
Following are the plots of running my scripts on the data set I created.

Results

Single Domain vs Two Domain Proteins

Length vs Interaction Energy

(red dots → single domain, blue dots → two domain contiguous, green dots → two domain non-contiguous)

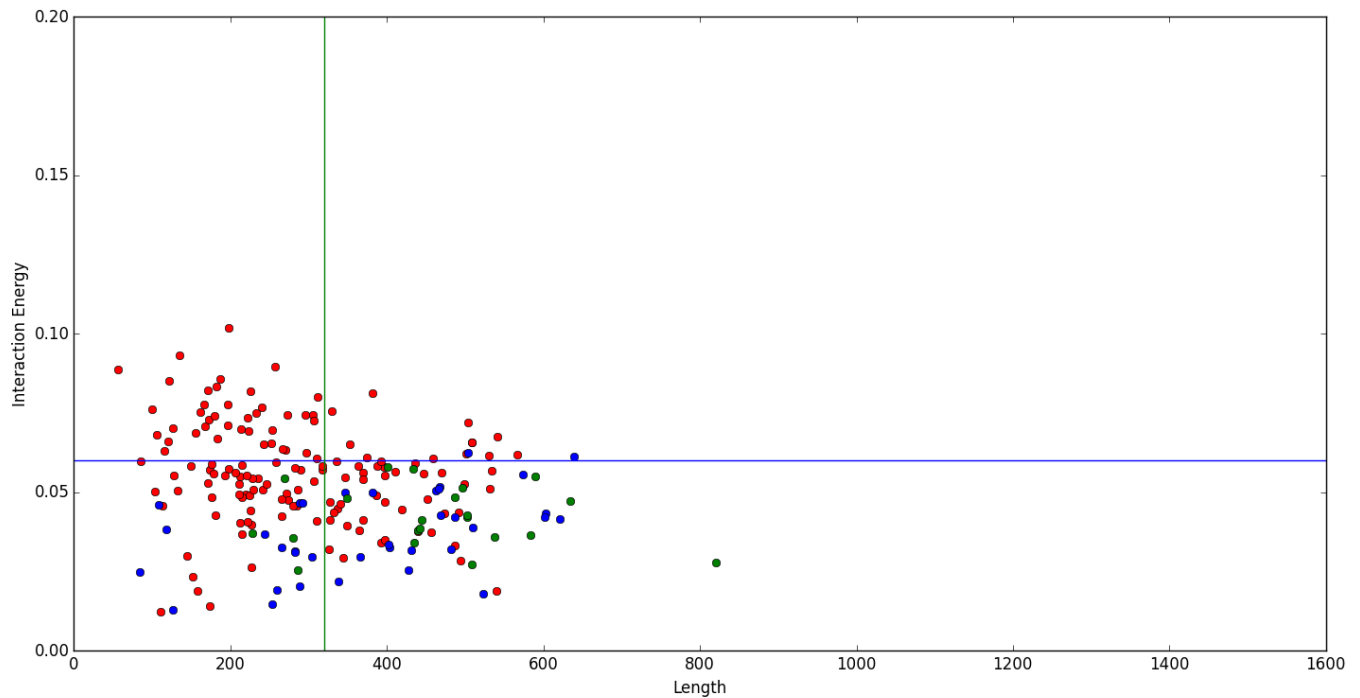


	Length	Interaction Energy	Single Domains correctly Identified
Single vs Two	≥ 150	≤ 0.04	575/647(88%)

Two Domain vs Three Domain Proteins

Length vs Interaction Energy

(red dots → two domain, blue dots → three domain contiguous, green dots → three domain non-contiguous)

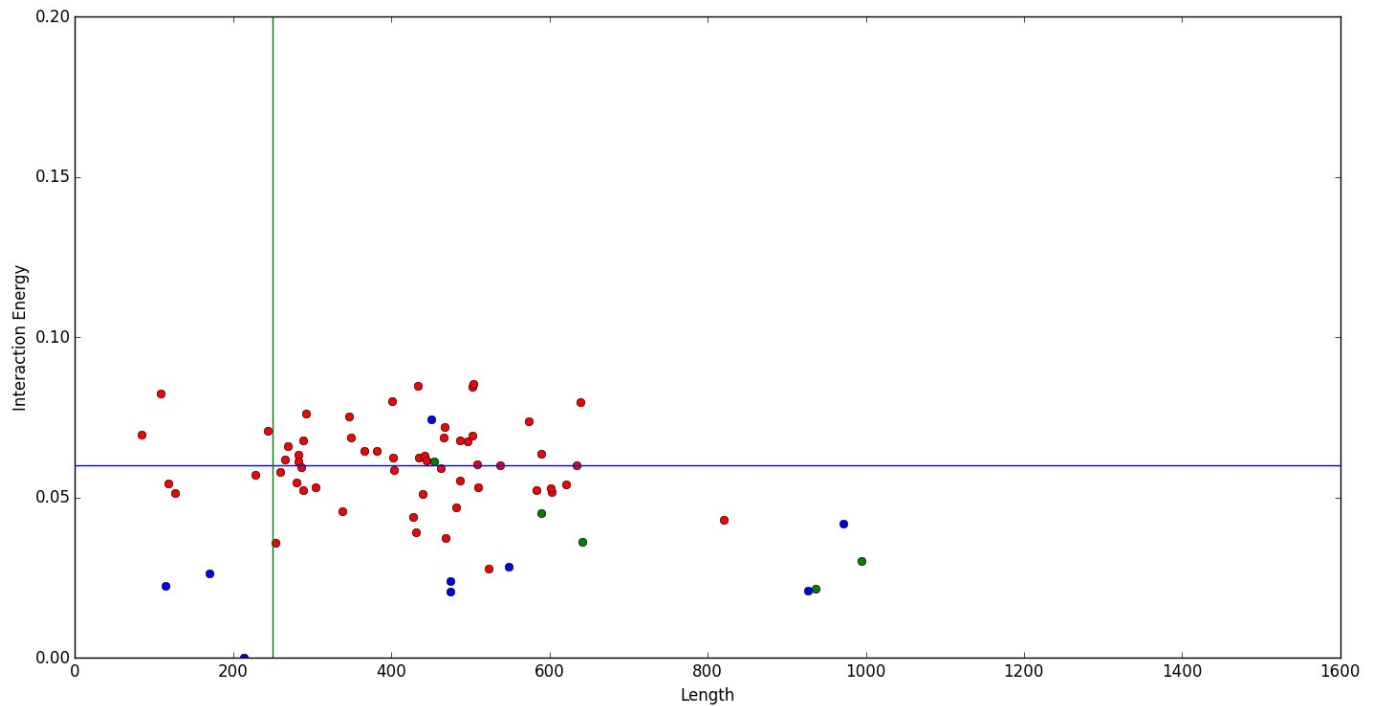


	Length	Interaction Energy	Two Domains Correctly Identified
Two vs Three	≥ 320	≤ 0.06	105/144(73%)

Three Domain vs Four Domain Proteins

Length vs Interaction Energy

(red dots → three domain, blue dots → four domain contiguous, green dots → four domain non-contiguous)

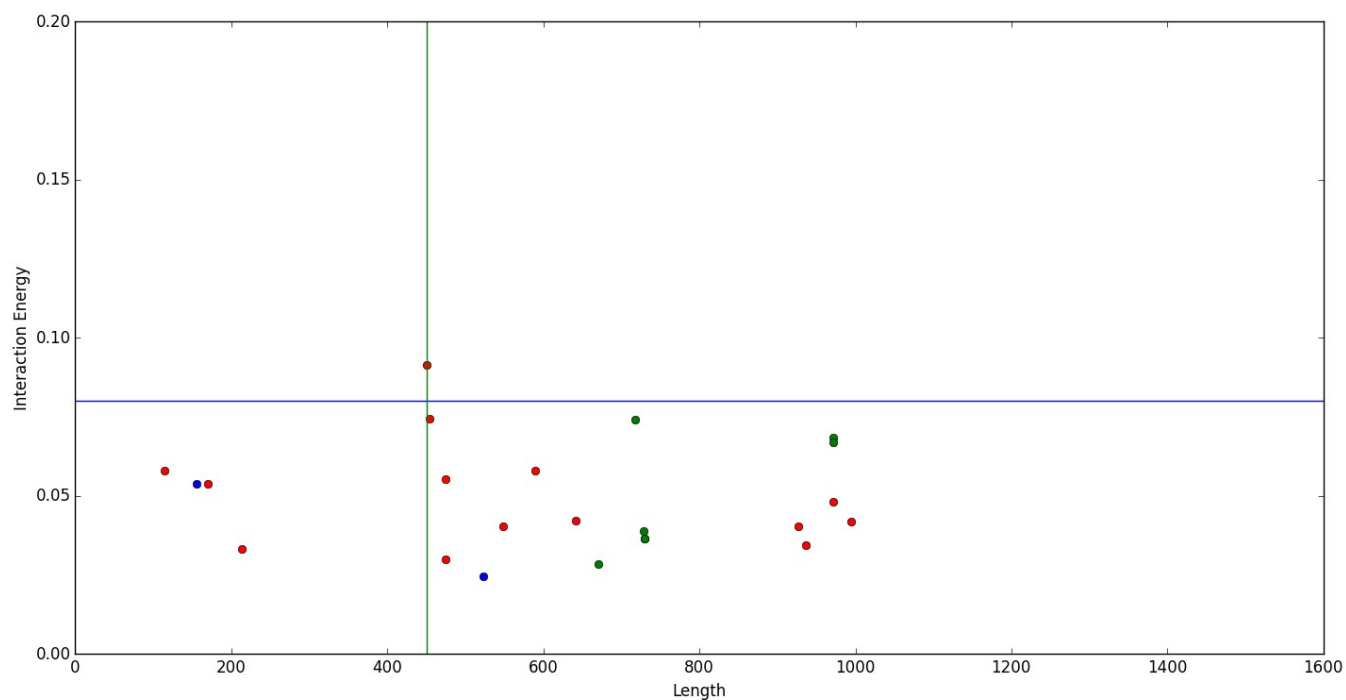


	Length	Interaction Energy	Three Domain Proteins Correctly Identified
Three vs Four	≥ 250	≤ 0.06	34/57(59.6%)

Four Domain vs Five Domain Proteins

Length vs Interaction Energy

(red dots → four domain, blue dots → five domain contiguous, green dots → five domain non-contiguous)



	Length	Interaction Energy	Four Domain Proteins Correctly Identified
Four vs Five	≥ 450	≤ 0.08	4/14(28.5%)