SOCIAL COMPUTING - P1 HYPOTHESIS 2 RESULTS

Density vs. Degree of Intersection (107)

0.25 0.2 0.1 0.2 0.4 0.6 0.8 1 1.2 1.4 Density of each circle

Fig 1 – Graph for Ego Node 107

Density vs. Degree of Intersection (686)

Fig 2 – Graph for Ego Node 686

Hypothesis - A circle with a higher density would have a greater degree of intersection with other circles

As it can be seen in the graph from Fig 1, the given hypothesis is true.

When the density, is higher an increase in the degree of intersection is present and is noticed apart from a few skewed points on the graph. A common trend of the increase in the degree of intersection is observed.

We know that,

Density is the ratio of existing edges within the members of a circle to the maximum possible edges within member of circle.

A circle which has a higher density simply means that there are more edges present in the circle. If there are more edges present, it implies that a higher number of nodes are connected which therefore results in more intersection with other circles