Analysis of Social and Information Networks
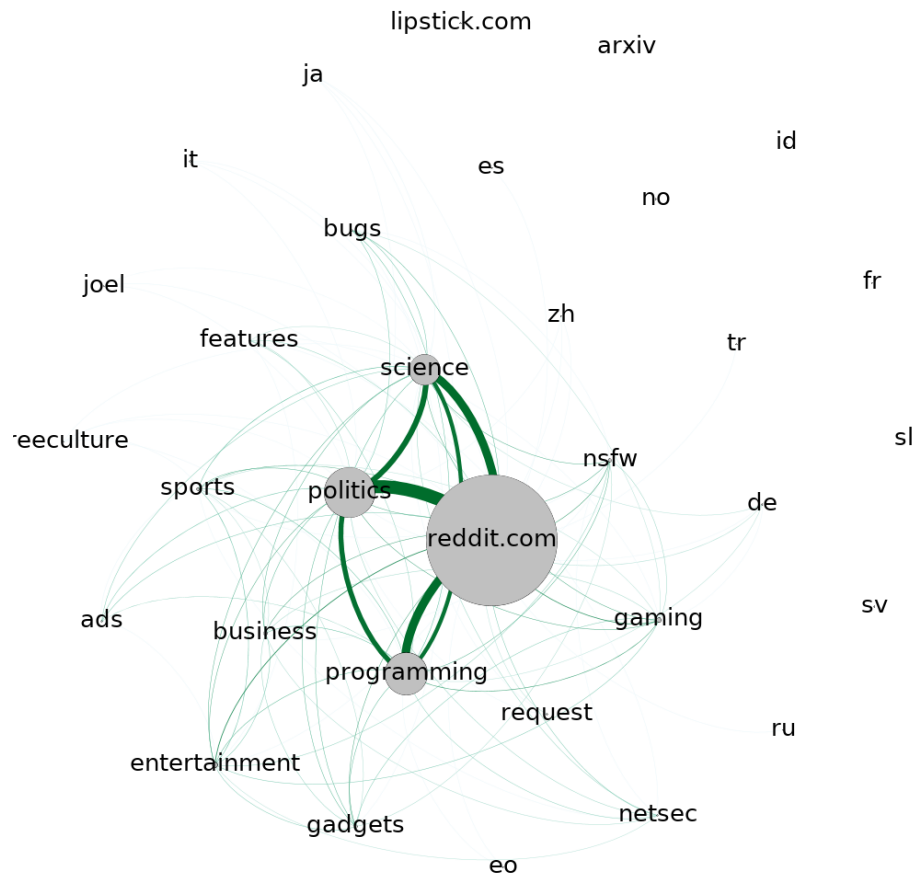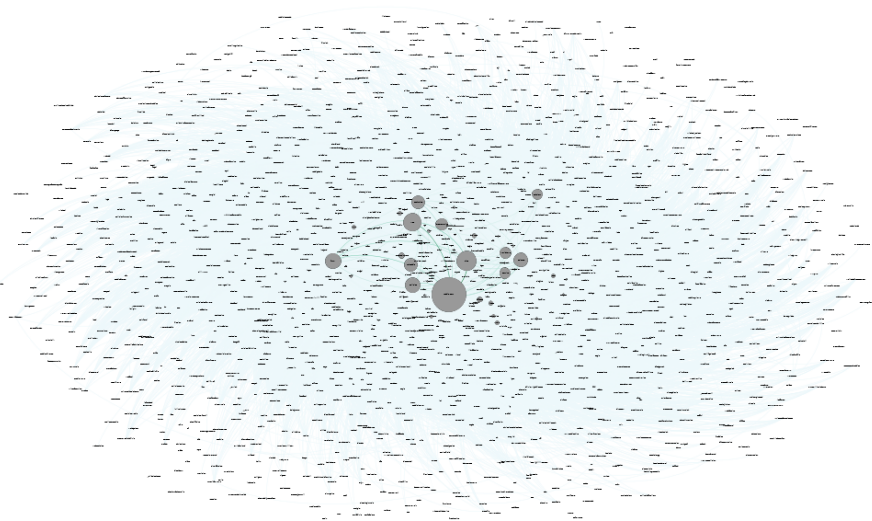
Chapter 3

- **Users tend to gravitate towards the bigger subs**
  - Lots of shared users between all subreddits
  - Isolated subreddits are usually very small
  - High number of connections between nodes
  - High Clustering Coefficient ≈ 85%

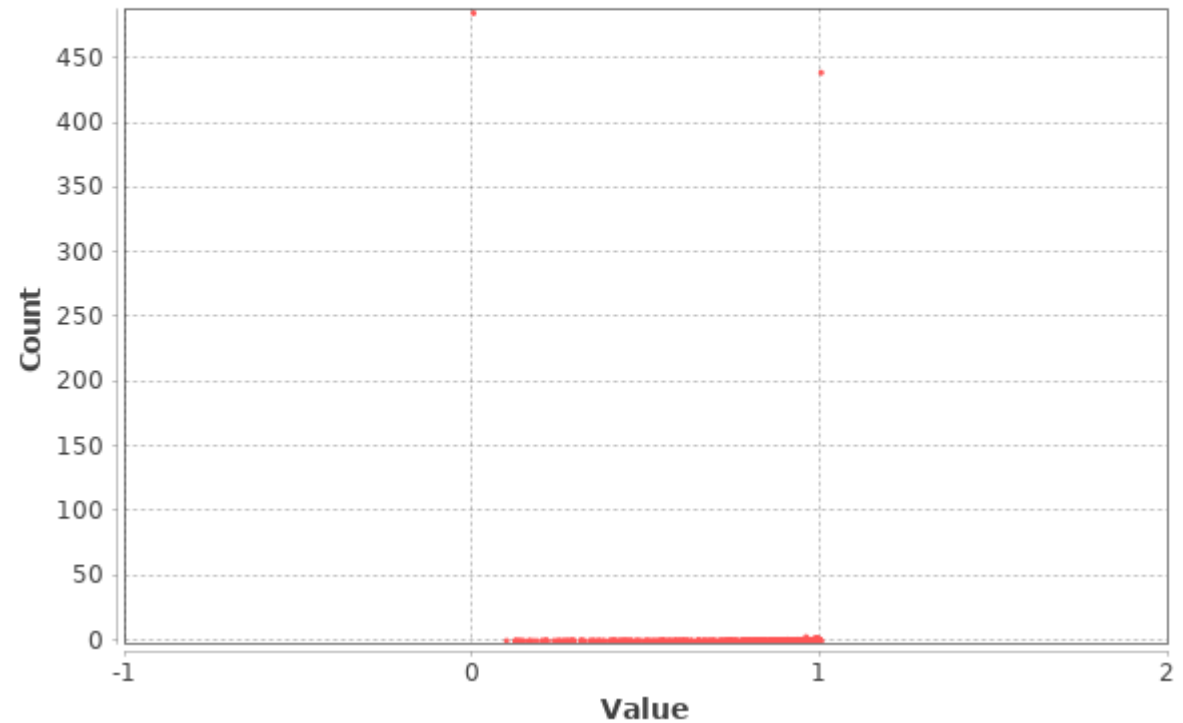# Clustering Coefficient Over Time

Average Clustering Coefficient: 0.875
Total triangles: 2463055
The Average Clustering Coefficient is the mean value of individual coefficients.

Clustering Coefficient Distribution

Clustering Coefficient Over Time

- **Small increase overall of the Clustering Coeff.**

  - All subs tend to be connected, considering it just takes one shared author to establish a connection

  - Low number of local and global bridges

  - Increase in coeff. can be due to growing subs with more diverse commentators: higher participation in a large number of subs will increase the number of connections between all
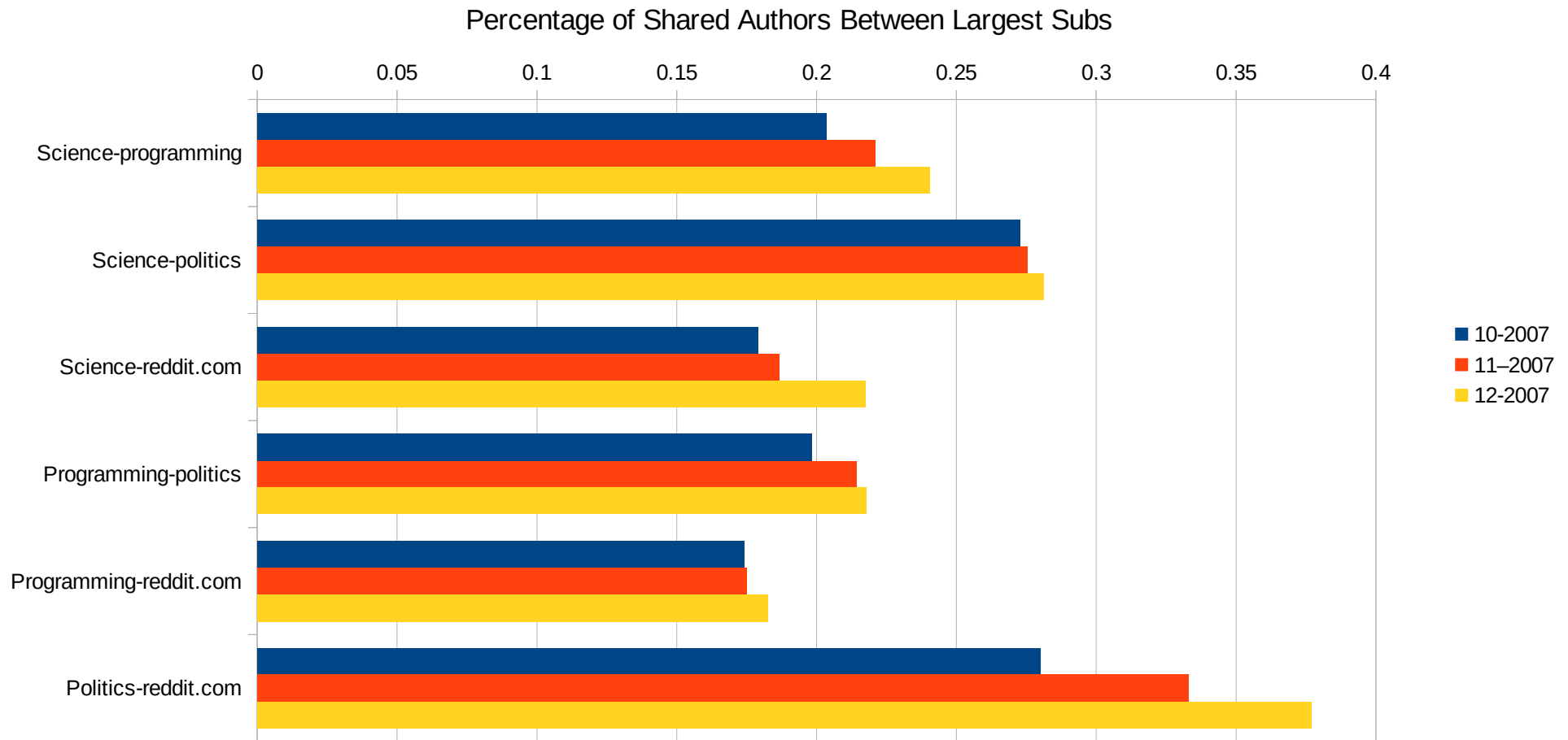
- **Triadic closure usually exists:**

  - If 3 subs share one author, all of them will be connected

- **More interesting to analyze the evolution of shared authors between specific subs**

  - "**Triadic Reinforcement**": subs that are connected will tend to increase the weights between them

Triadic Reinforcement Between Subs

Connected subs become increasingly more connected

Percentage of Shared Authors Between Largest Subs

Triadic Reinforcement Between Subs

- **It's hard to say if there is a real effect of Triadic Closure happening**
  - A connection to another sub probably doesn't affect its users to actively engage in the other, unlike with friend networks
  - Since these are the 4 most popular subs at the time, it's more likely that more users visit and interact with them, since they are growing in popularity
- **The increasing popularity of the site brings new users to all the subs, increasing their connections**