

clusteringcoeff

January 31, 2022

The Graph Structure of Public Software Development

Antoine Pietri(1), Guillaume Rousseau(2) and Stefano Zacchiroli(3)

1. Inria, Paris, France. antoine.pietri@inria.fr
2. Université de Paris, Paris, France. guillaume.rousseau@u-paris.fr
3. LTCI, Tlcom Paris, Institut Polytechnique de Paris, Paris, France. stefano.zacchiroli@telecom-paris.fr

TODO: Add citation string

1 Replication Package : Clustering Coefficient Distribution

```
[3]: from pathlib import Path
import matplotlib.pyplot as plt
import numpy as np
import common

DATASET = Path('../experiments/clusteringcoeff')

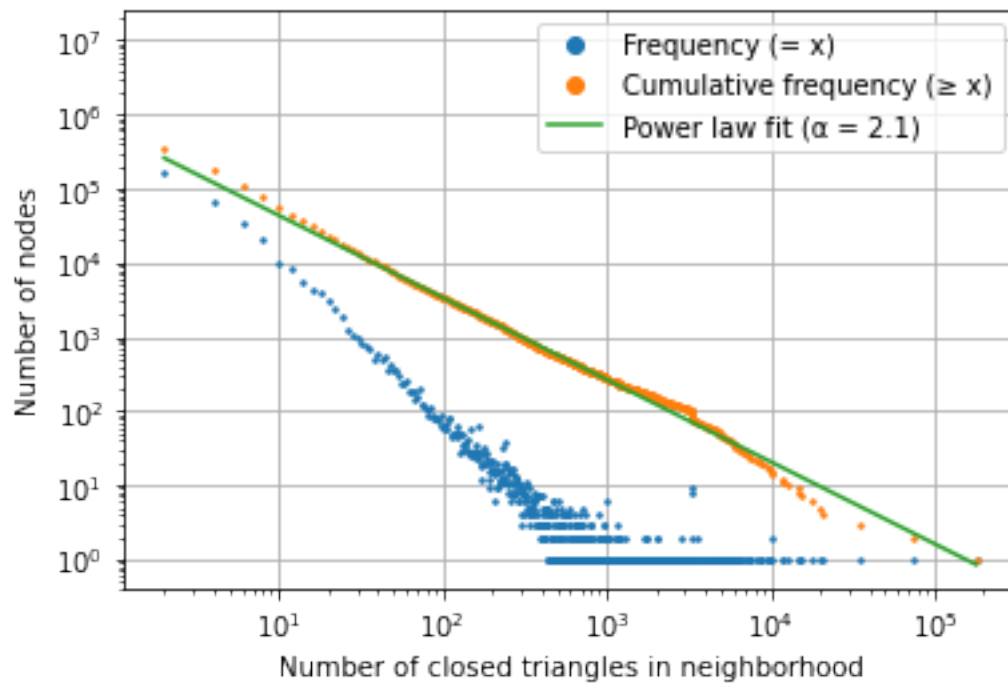
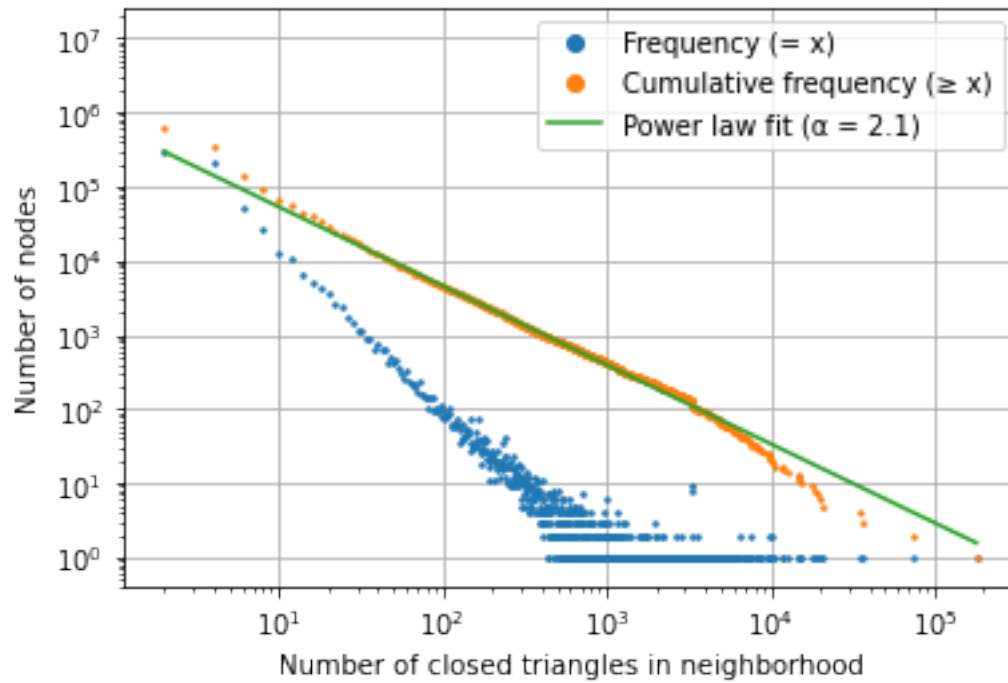
def show_distribution(name):
    title = "Clustering coefficient distribution ({}-{})".format(
        common.LAYERS[name],
        ' ~ 1% uniform sample'
    )

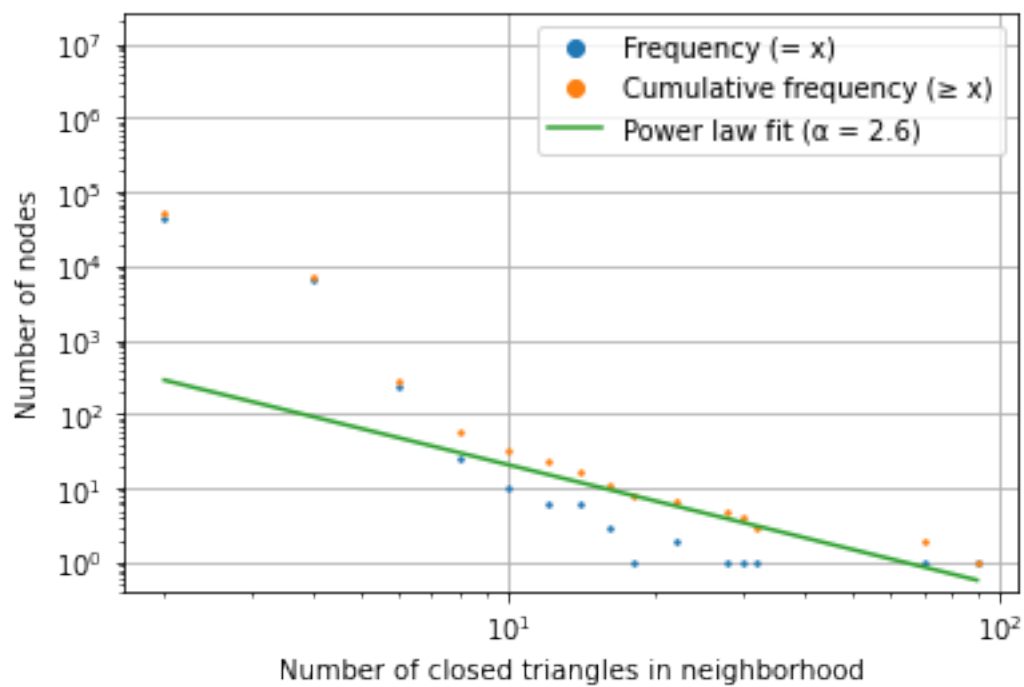
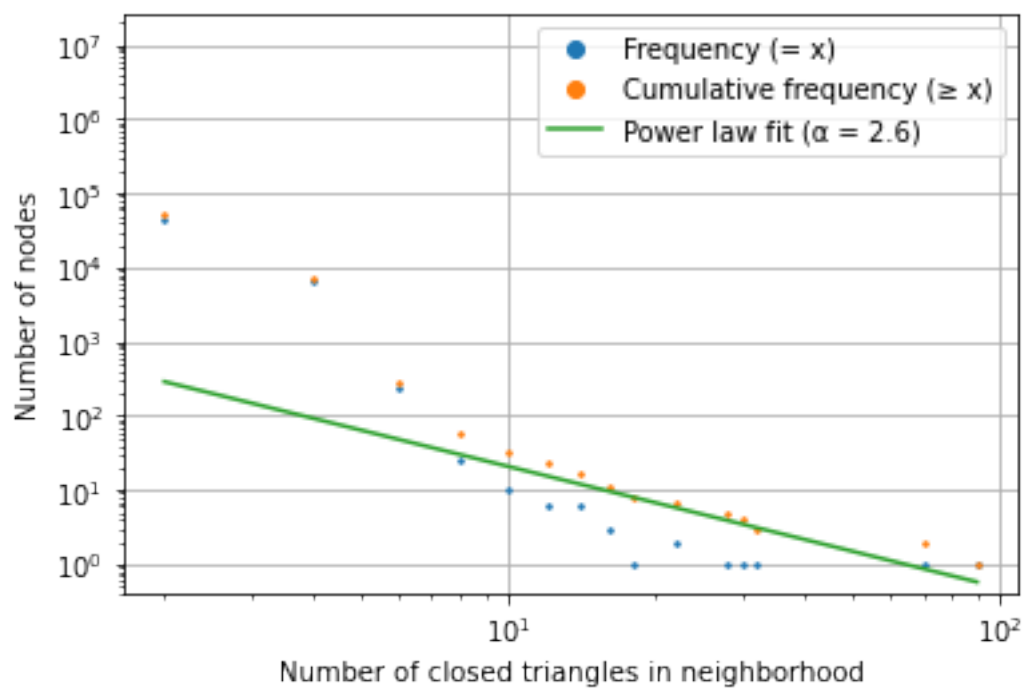
    x, y = common.load_text_distribution(DATASET / 'distribution-{}.txt'.
    →format(name.replace('+', '')))
    dist = common.Distribution(x, y, "Number of closed triangles in_
    →neighborhood", "Number of nodes", title)
    common.plot_all(dist, 'figures/clusteringcoeff', name)
```

```
[4]: show_distribution('full')
show_distribution('dir+cnt')
show_distribution('rev')
show_distribution('rel+rev')
```

```
show_distribution('ori+snp')
```

Singular histogram ori+snp





[]: