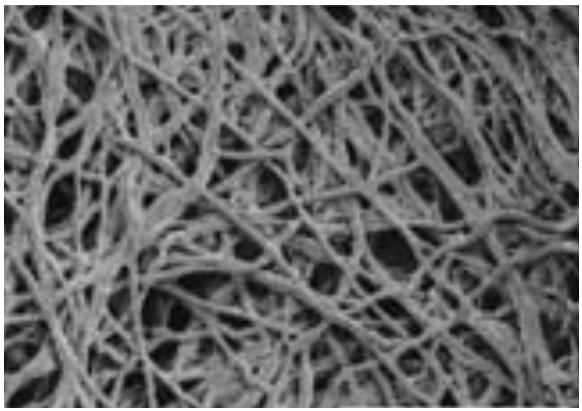
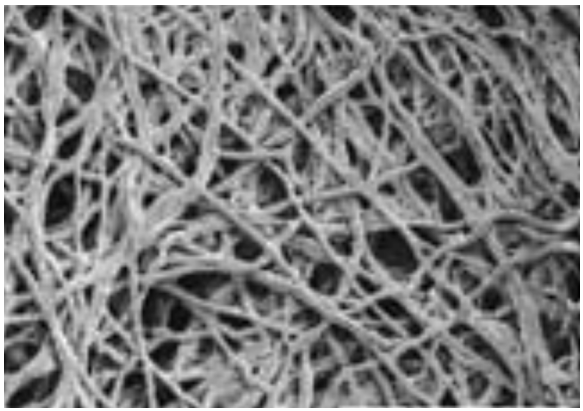
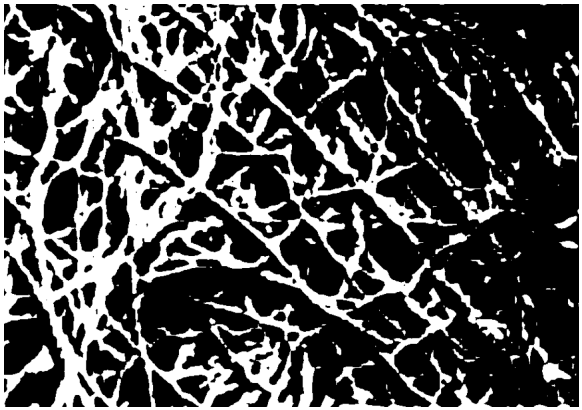
Original Image



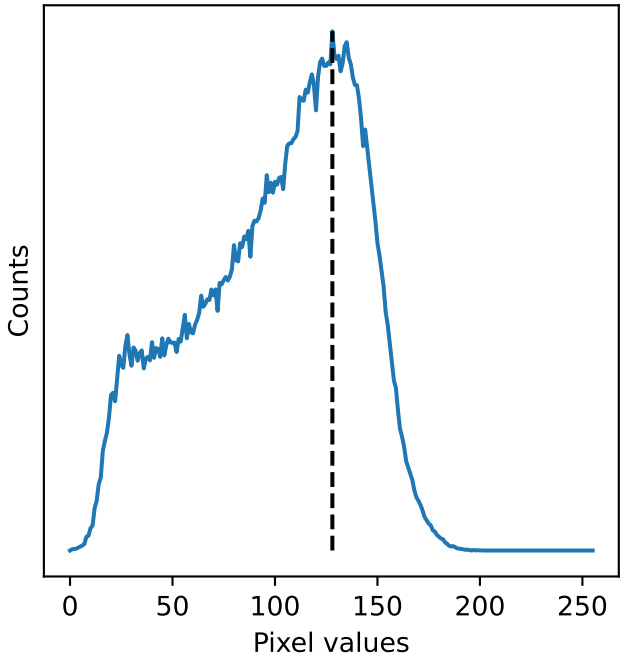
Processed Image



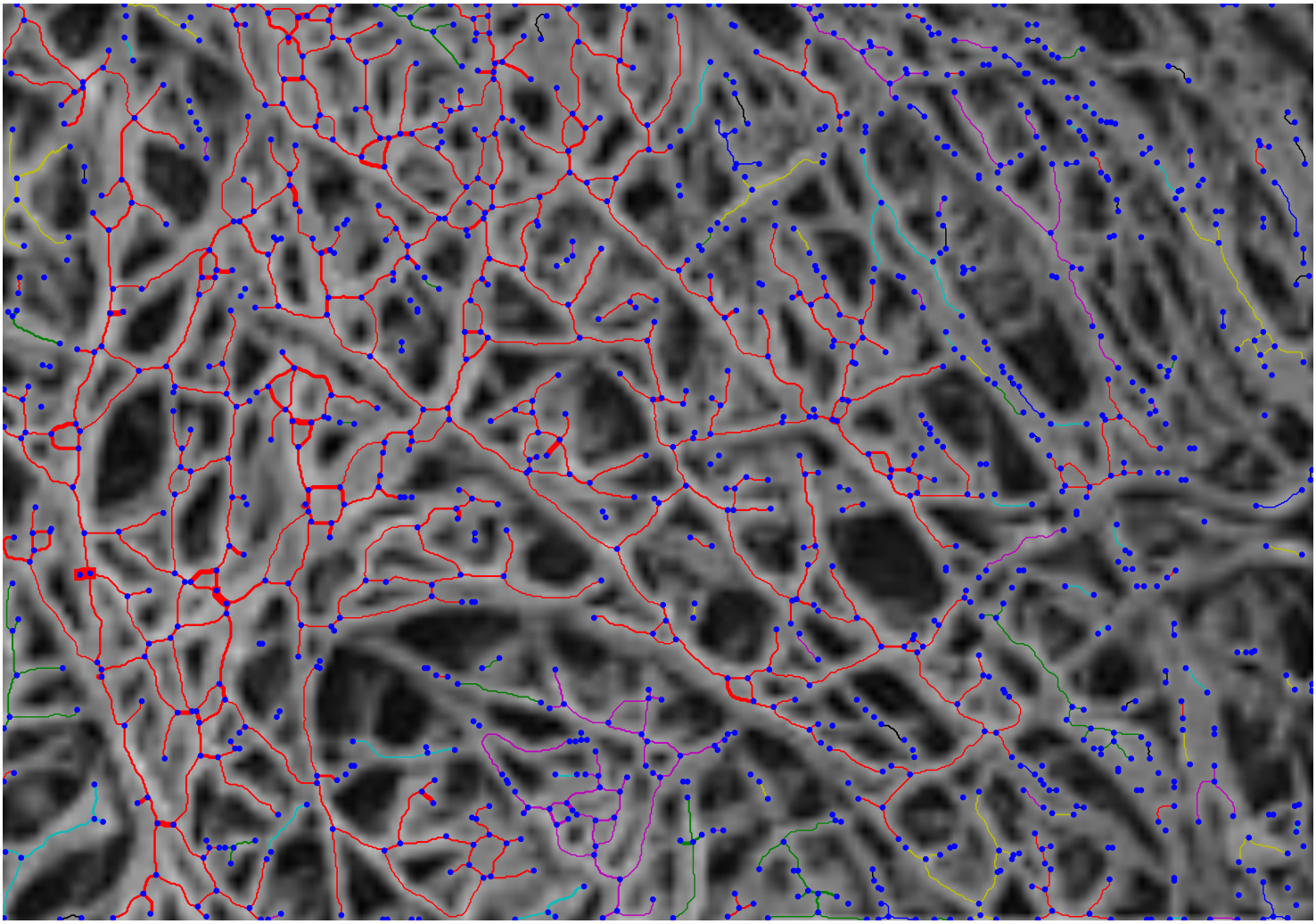
Binary Image



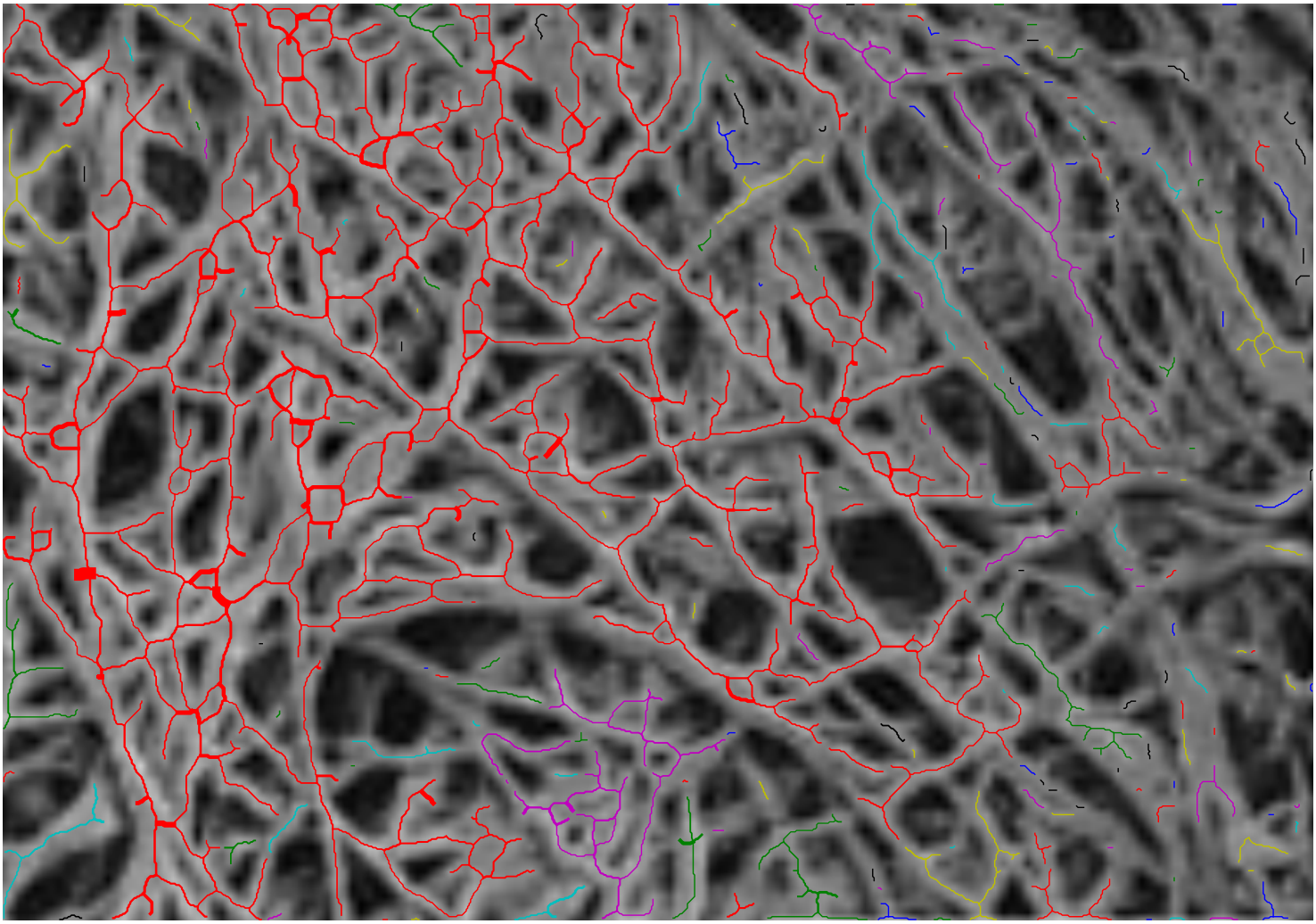
Histogram of Processed Image



Graph Node Plot

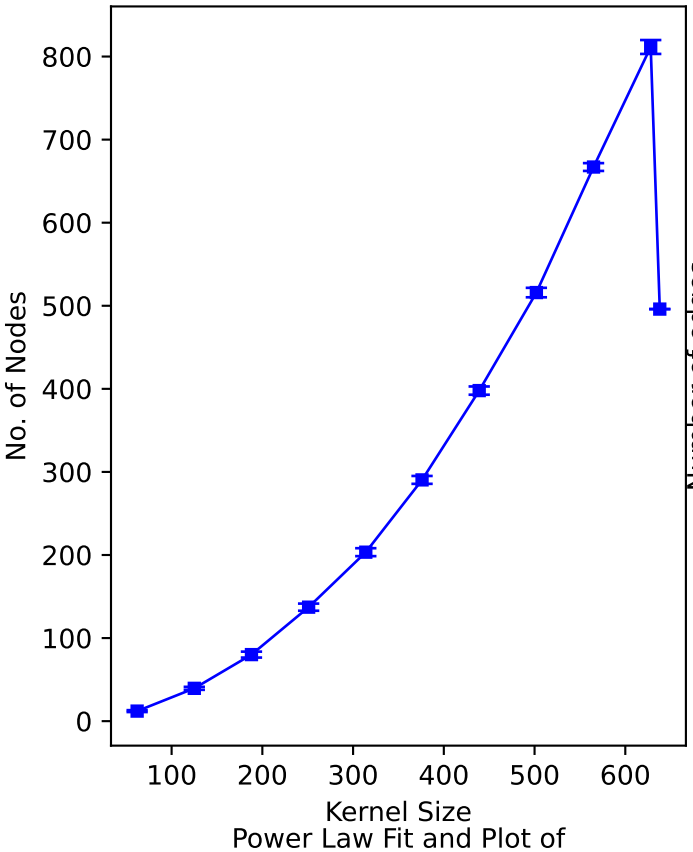


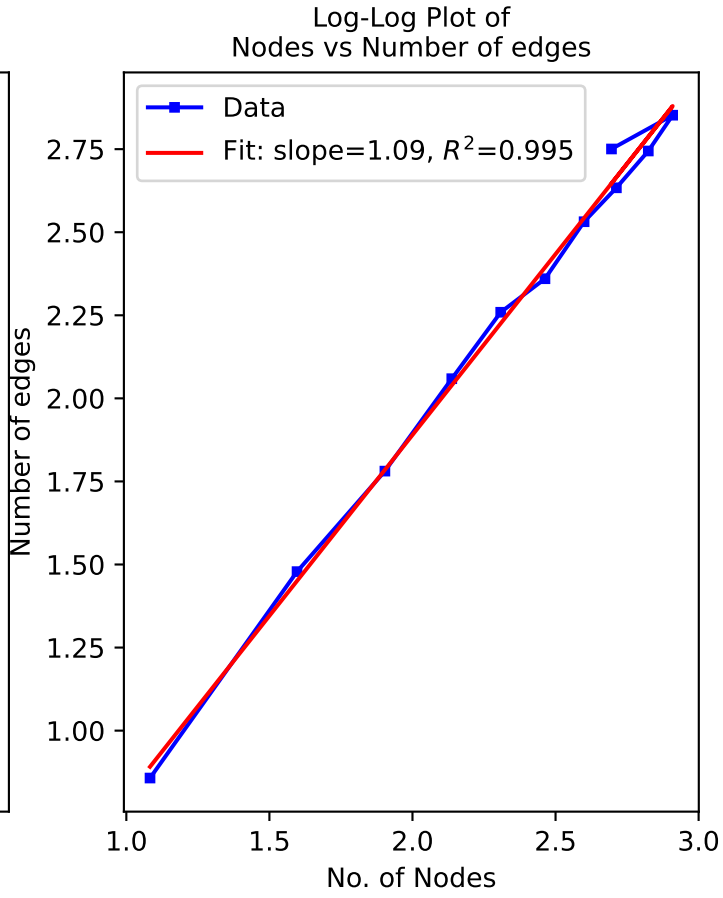
Graph Edge Plot

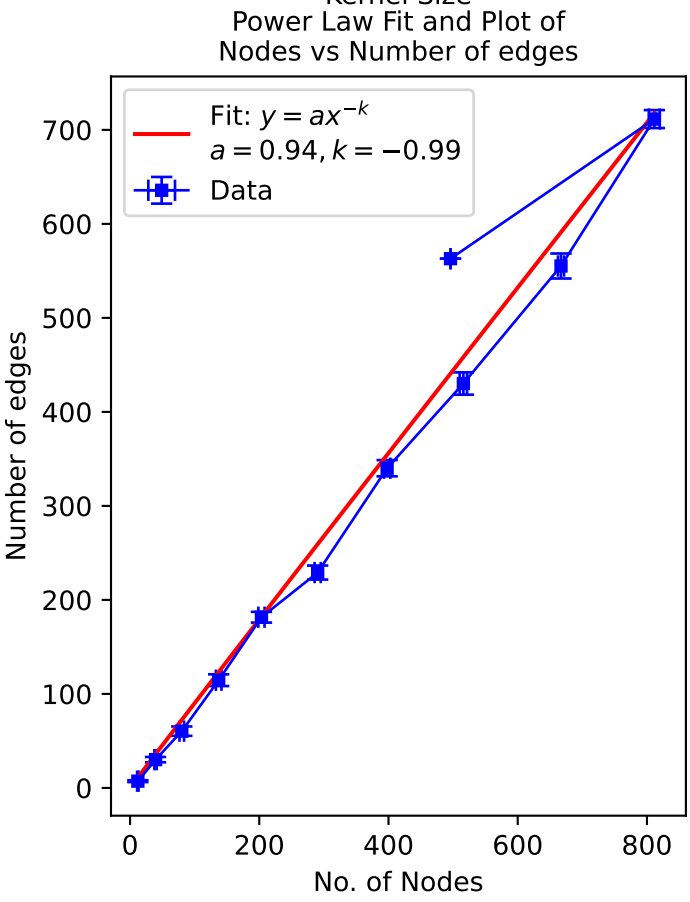


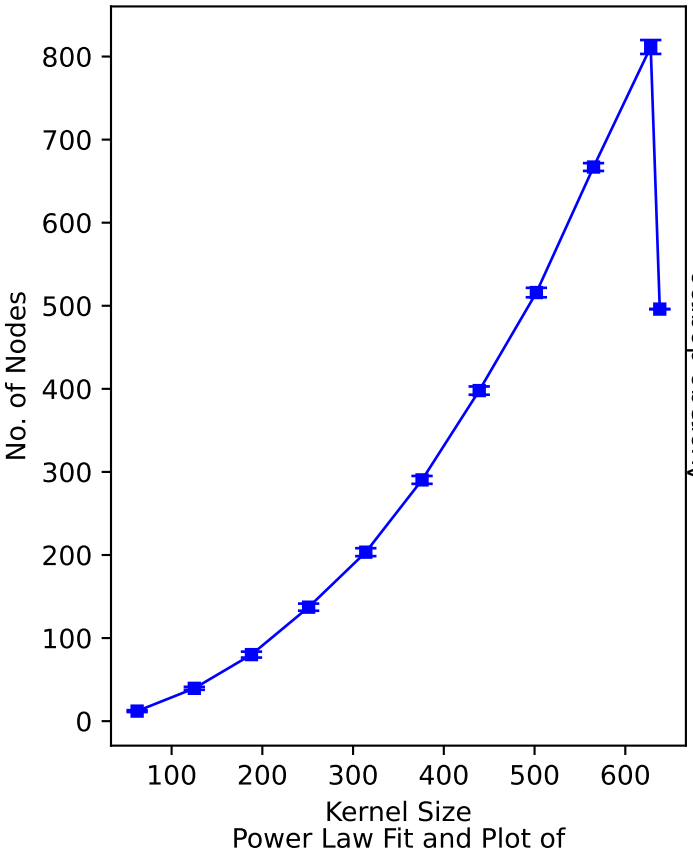
Unweighted GT parameters

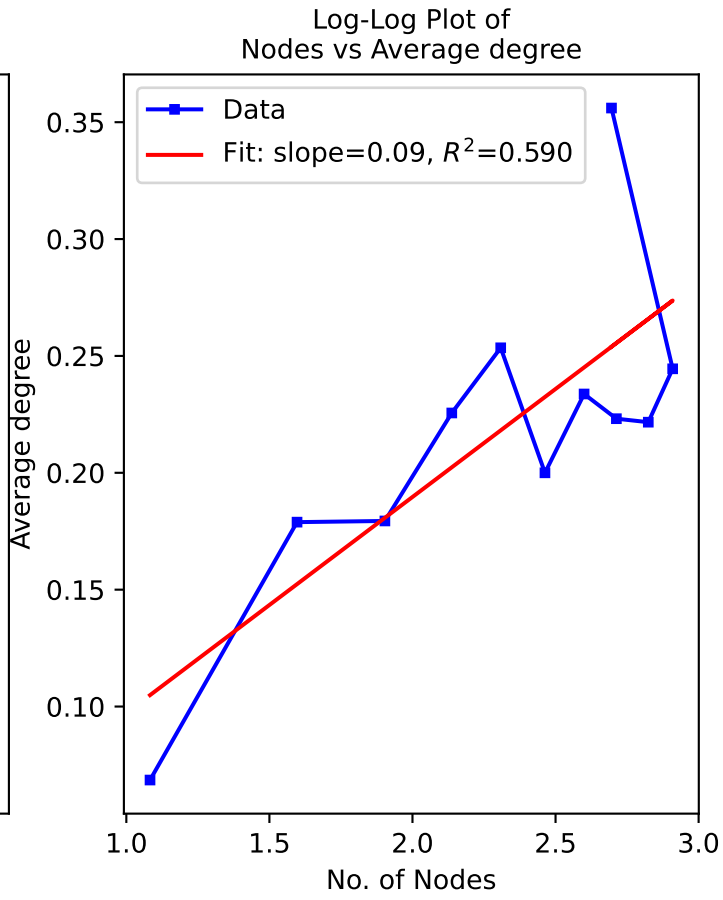
Number of nodes	496.0
Number of edges	563.0
Average edge angle (degrees)	169.348
Median edge angle (degrees)	88.091
Average degree	2.27016
Network diameter	40.0
Graph density	0.00459

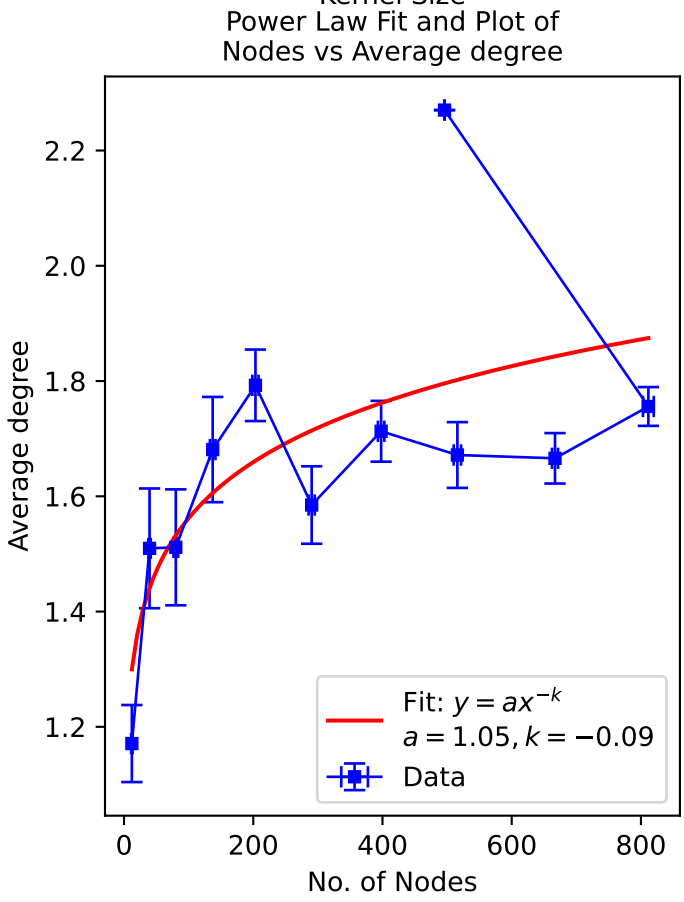

Kernel Size vs No. of Nodes
No. of Nodes
Kernel Size
0
100
200
300
400
500
600
700
800
100
200
300
400
500
600

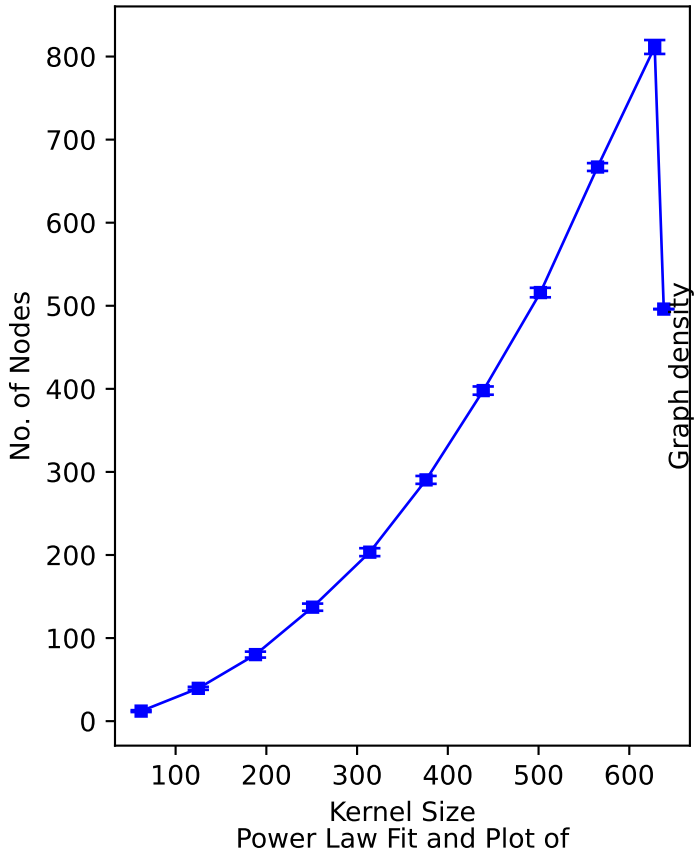

Log-Log Plot of
Nodes vs Number of edges
Data
Fit: slope=1.09, R^2=0.995
Number of edges
No. of Nodes
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
1.0
1.5
2.0
2.5
3.0

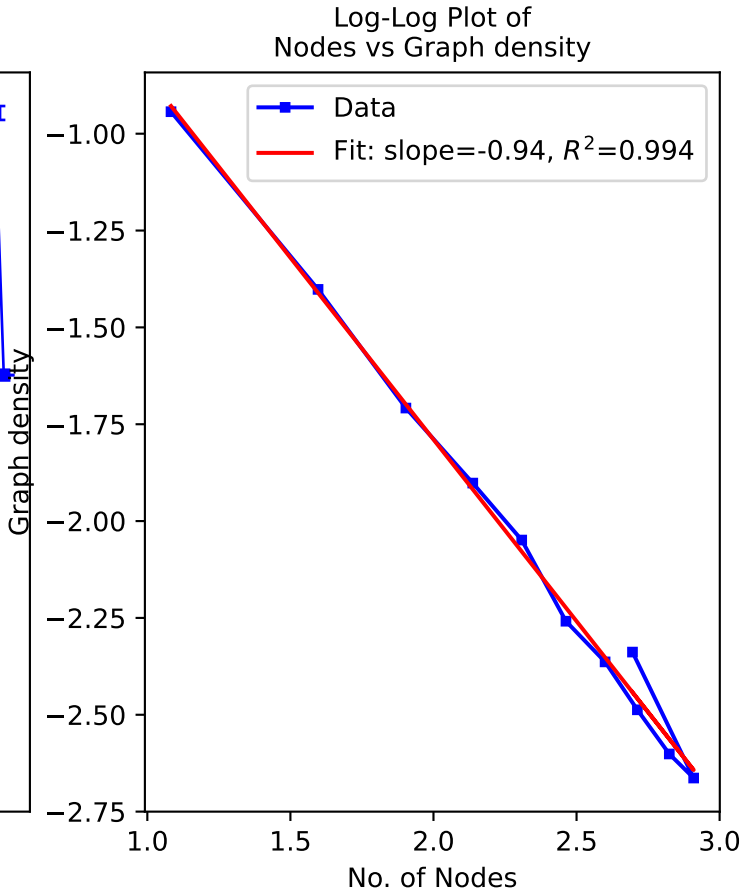

Power Law Fit and Plot of
Nodes vs Number of edges
Fit: $y = ax^{-k}$
$a = 0.94, k = -0.99$
Data
Number of edges
No. of Nodes
0
100
200
300
400
500
600
700
0
200
400
600
800

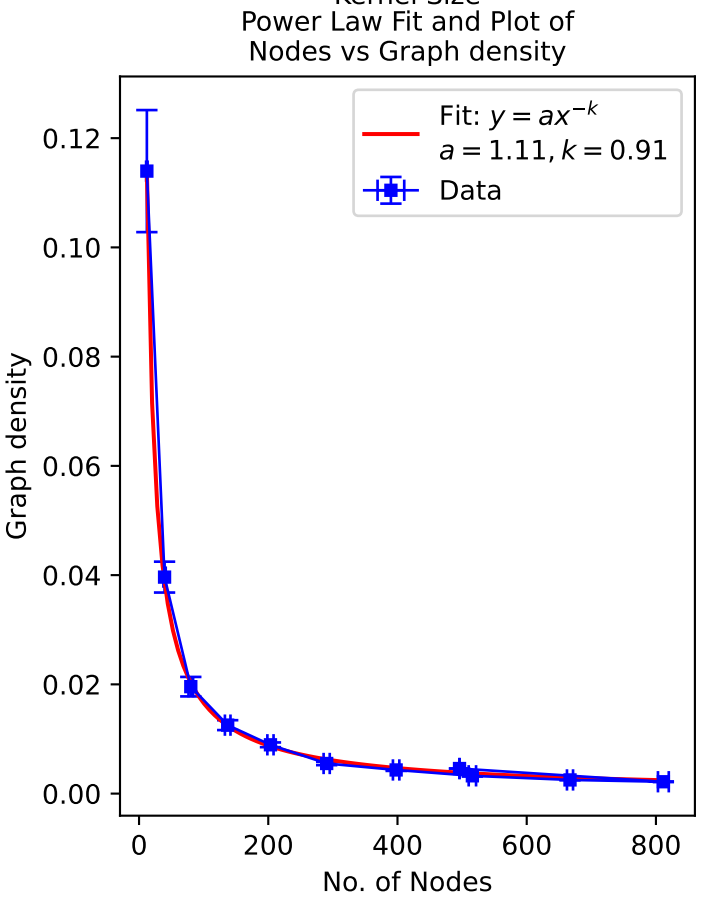

Kernel Size vs No. of Nodes
No. of Nodes
Kernel Size
0
100
200
300
400
500
600
700
800
100
200
300
400
500
600

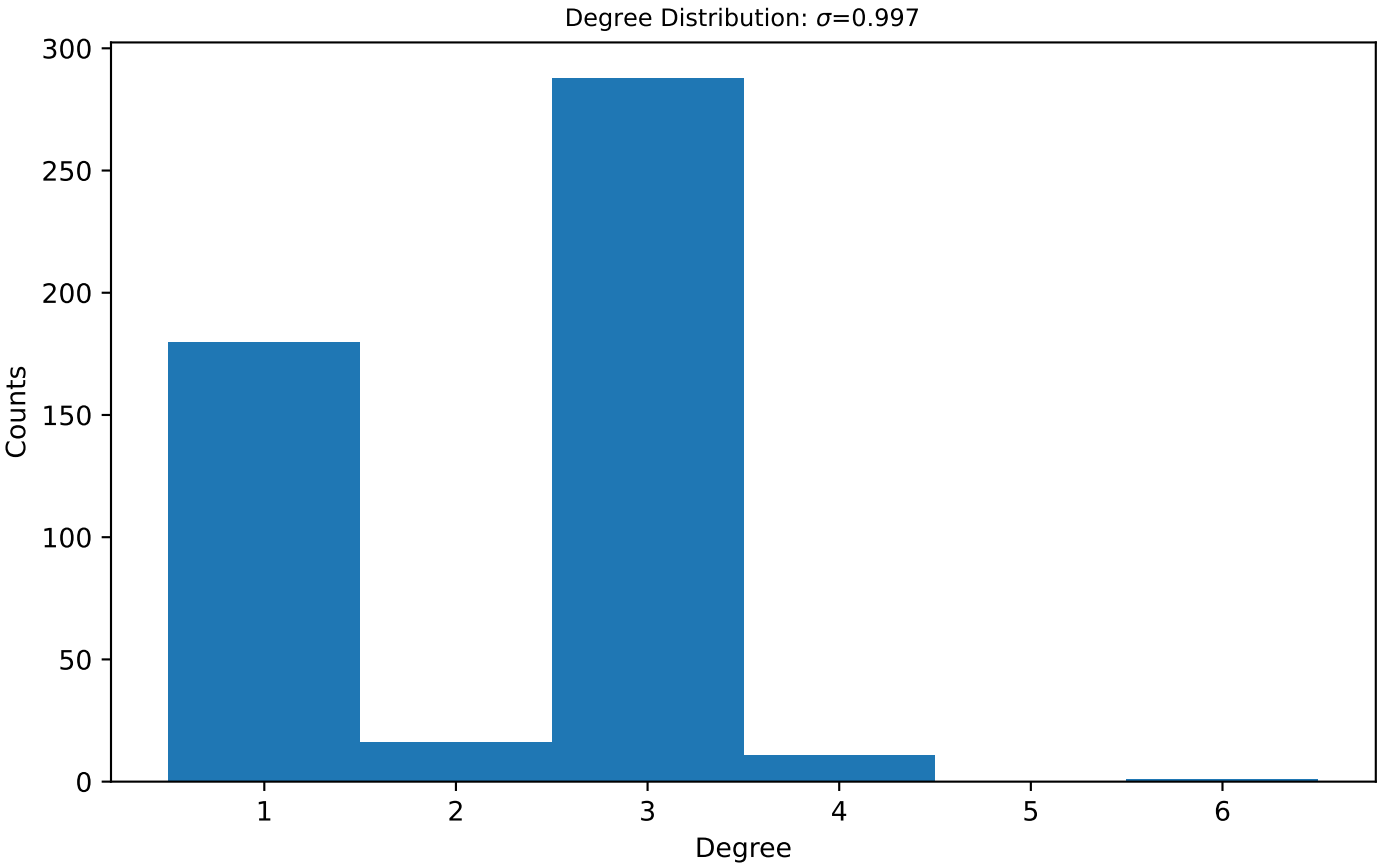

Log-Log Plot of
Nodes vs Average degree
Data
Fit: slope=0.09, R^2=0.590
Average degree
No. of Nodes
0.10
0.15
0.20
0.25
0.30
0.35
1.0
1.5
2.0
2.5
3.0


Power Law Fit and Plot of
Nodes vs Average degree
Fit: $y = ax^{-k}$
$a = 1.05, k = -0.09$
Data
Average degree
No. of Nodes
1.2
1.4
1.6
1.8
2.0
2.2
0
200
400
600
800


Kernel Size vs No. of Nodes
No. of Nodes
Kernel Size
0
100
200
300
400
500
600
700
800
100
200
300
400
500
600


Log-Log Plot of
Nodes vs Graph density
Data
Fit: slope=-0.94, R^2=0.994
Graph density
No. of Nodes
−1.00
−1.25
−1.50
−1.75
−2.00
−2.25
−2.50
−2.75
1.0
1.5
2.0
2.5
3.0


Power Law Fit and Plot of
Nodes vs Graph density
Fit: $y = ax^{-k}$
$a = 1.11, k = 0.91$
Data
Graph density
No. of Nodes
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0
200
400
600
800


Degree Distribution: σ=0.997
300
250
200
150
100
50
0
Counts
1
2
3
4
5
6
Degree

Run Info

InVitroBioFilm.png
2025-07-18 14:28:19

Image Filter Configurations
Global Threshold (128.0) || Gamma = 1.0

Microscopy Parameters
Scalebar Value = 0.0 nm || Scalebar Pixel Count = 1
Resistivity = 1.0Ωm

Image Scale
Size = 638 x 912 px || Scale Factor = 1.0

Graph Extraction Configurations