

Untitled2

September 22, 2022

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[8]: import csv
import networkx as nx
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[9]: G = nx.Graph()
#pridani vrcholu
#G.add_node(vrchol)
#G.add_edge(vrchol1, vrchol2)

with open("measurement.csv") as file:
    reader = csv.reader(file, delimiter=";")
    next(reader)
    for row in reader:
        bssid = row[2]
        timestamp = row[7]
        G.add_edge(bssid, timestamp)
```

```
[19]: import matplotlib.pyplot as plt
plt.title("title")
graph_positioning = nx.circular_layout(G)
graph_positioning = nx.random_layout(G)
graph_positioning = nx.spectral_layout(G)
graph_positioning = nx.spring_layout(G)
nx.draw(G, pos=graph_positioning, node_size=10, width=0.1,
        ↪node_color="limegreen",
        edge_color="magenta")
#plt.show()
plt.savefig("t.pdf")
```

title

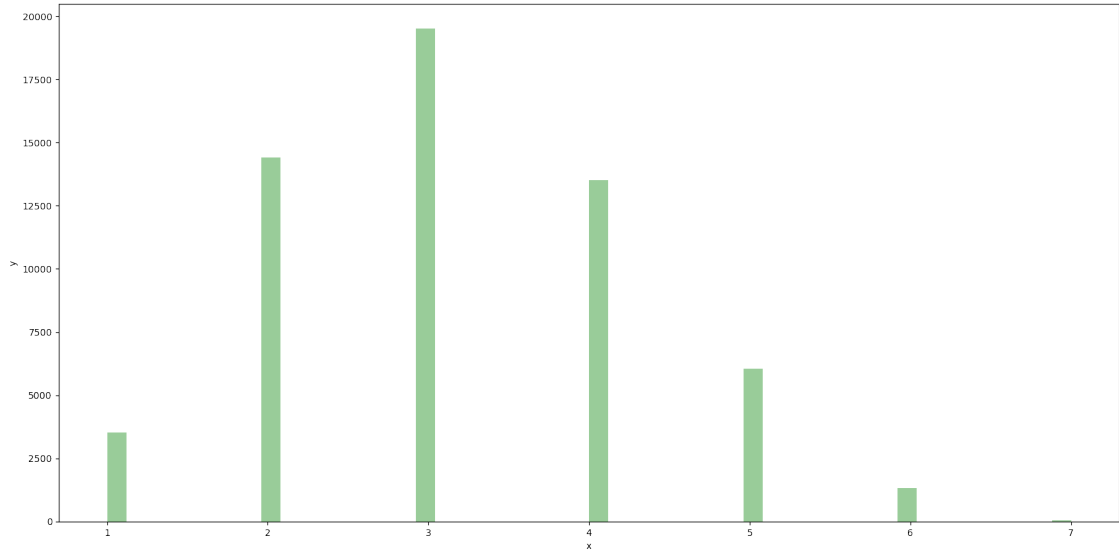


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[21]: paths = dict(nx.all_pairs_shortest_path(G))
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[22]: distances = []
for node1 in G:
    for node2 in G:
        if node1 == node2:
            continue
        if node2 in paths[node1].keys():
            distance = len(paths[node1][node2]) - 1
            distances.append(distance)
```

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[29]: #plt.hist(distances)
import seaborn as sns
plt.figure(figsize=(20, 10), dpi=100)
sns.distplot(distances, kde=False, color="green")
plt.title("")
plt.xlabel("x")
plt.ylabel("y")
```

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[29]: Text(0, 0.5, 'y')
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[]: