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# 1 The model

Here I will detail the math and implementation of the model. For now, here is a reference to what the section titles mean:

1. *Synapse Limit*: The maximum number of synapses each neuron can form.
2. *Spatial Scale*: The coefficient that determines how sharply the probability of connection decreases with respect to distance between each pair of neurons
3. *Development Time*: The number of iterations that the network was allowed to run and form connections.

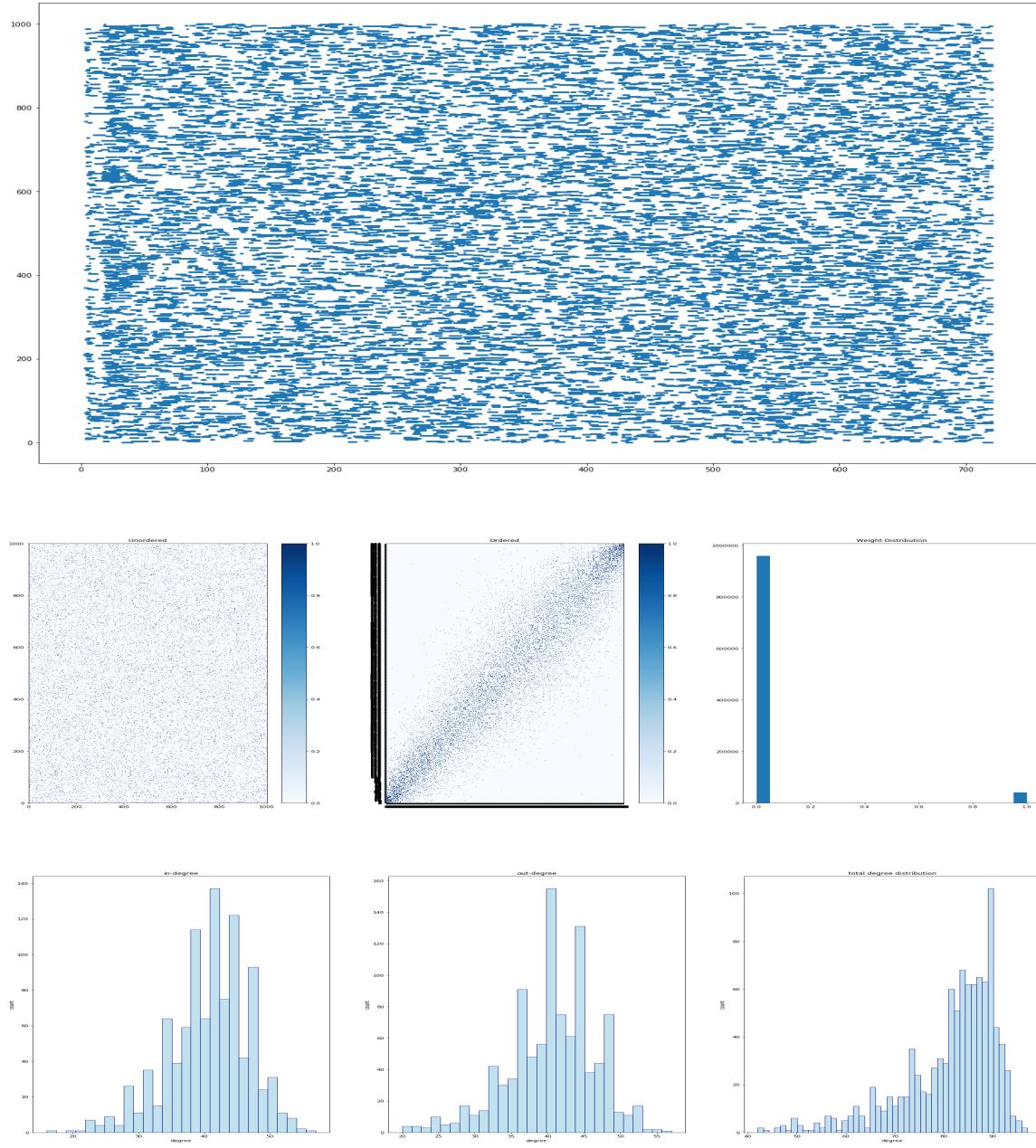
## 2 Synapse Limit: 100

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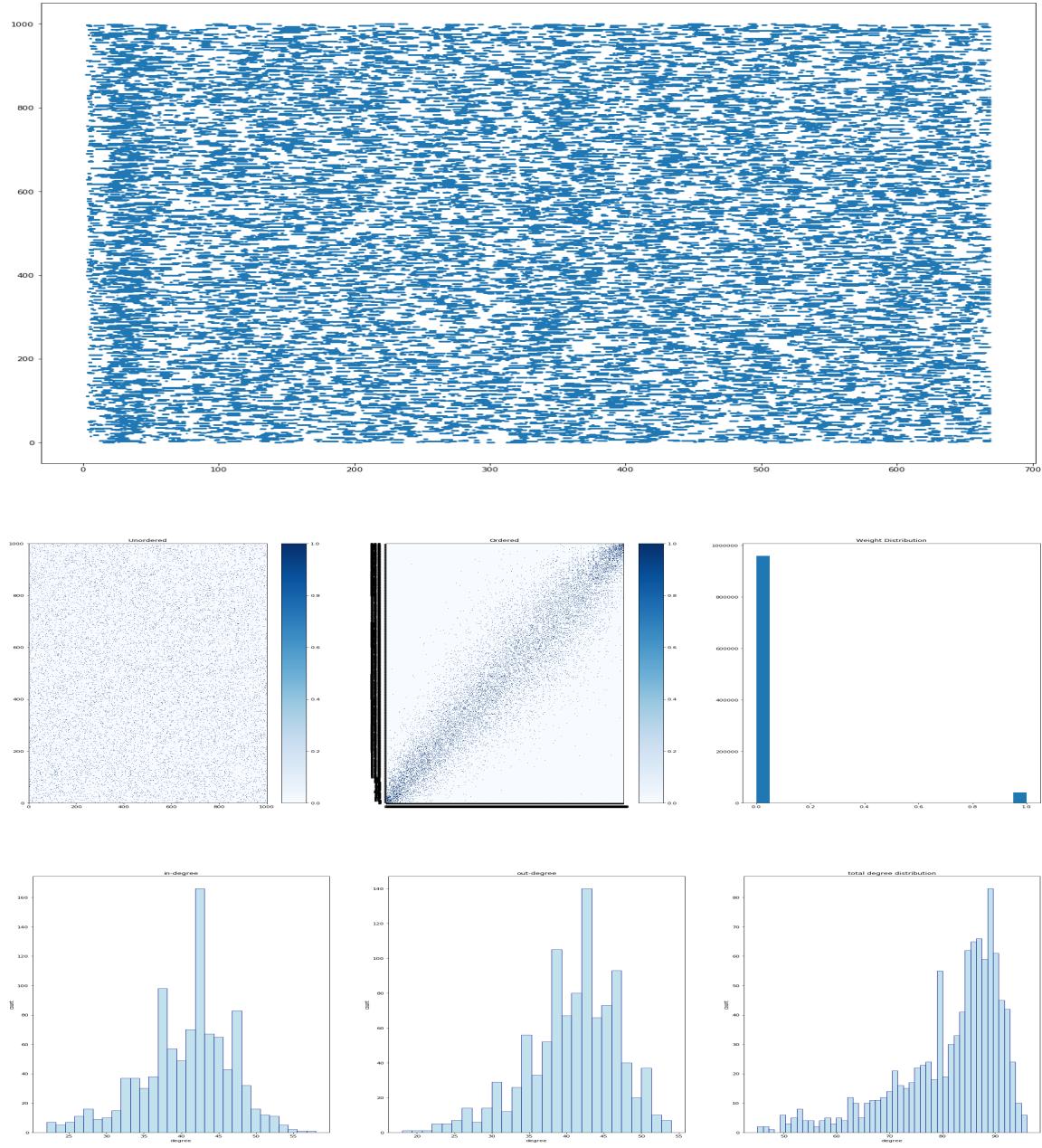
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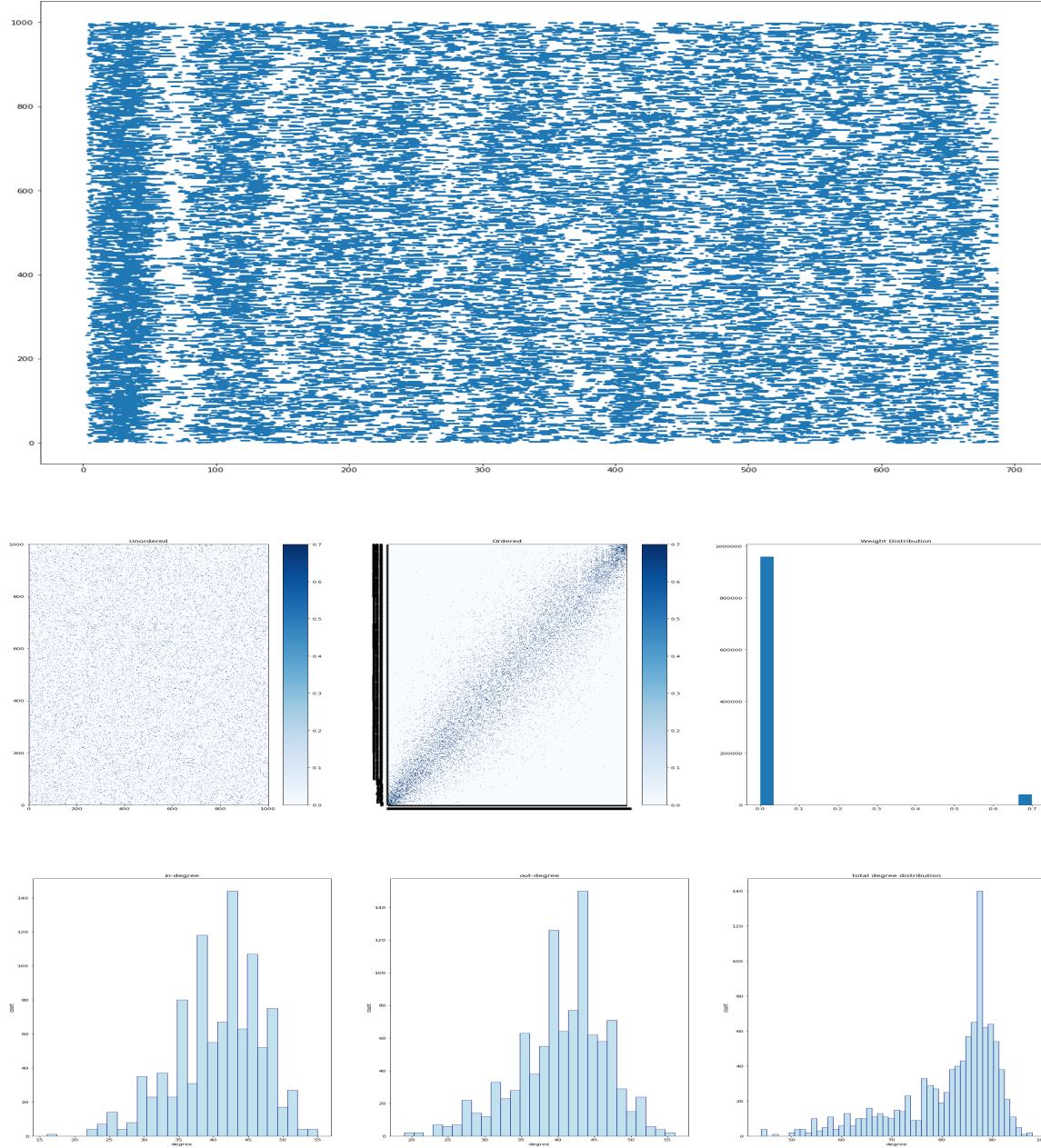
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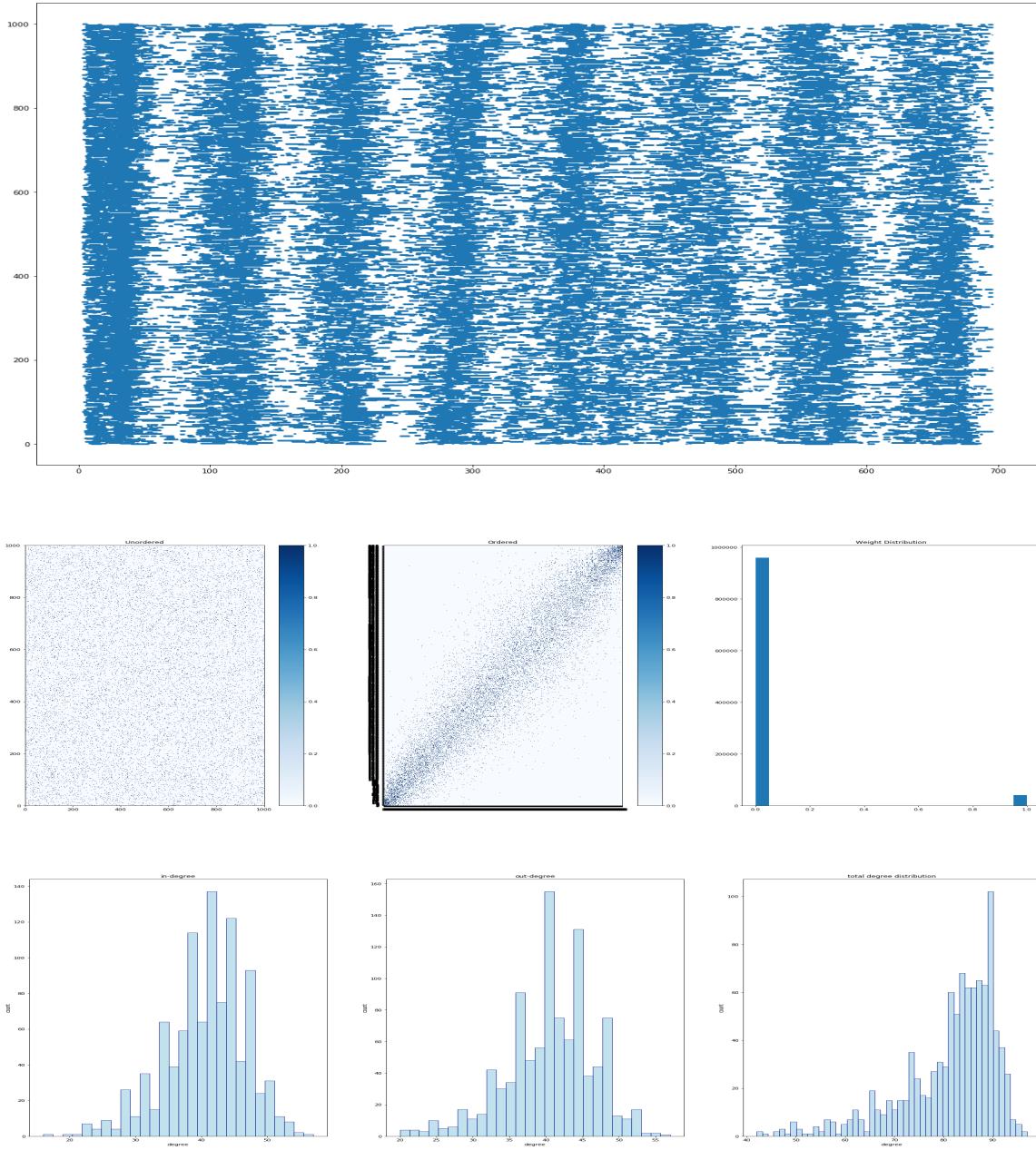
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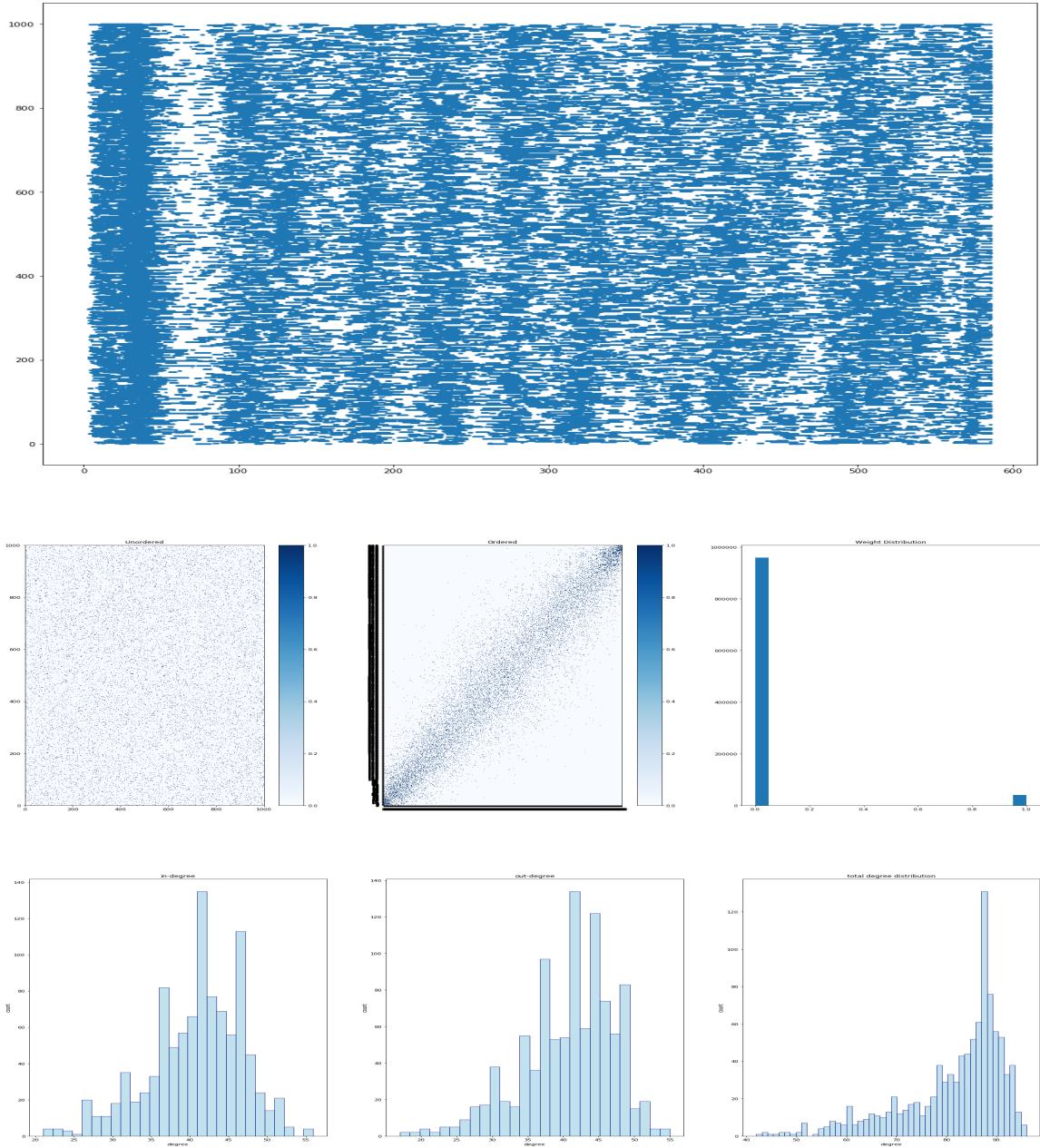
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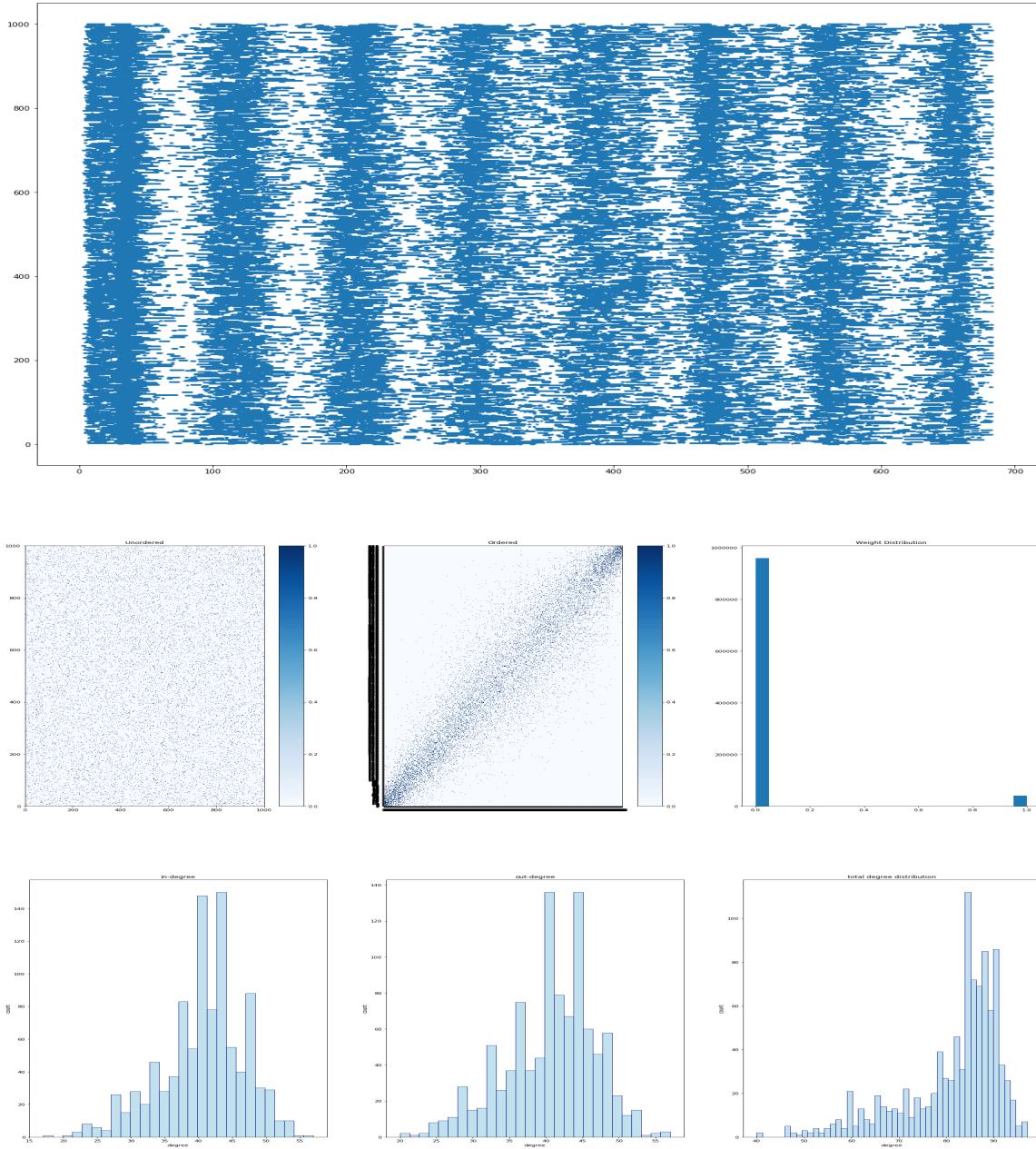
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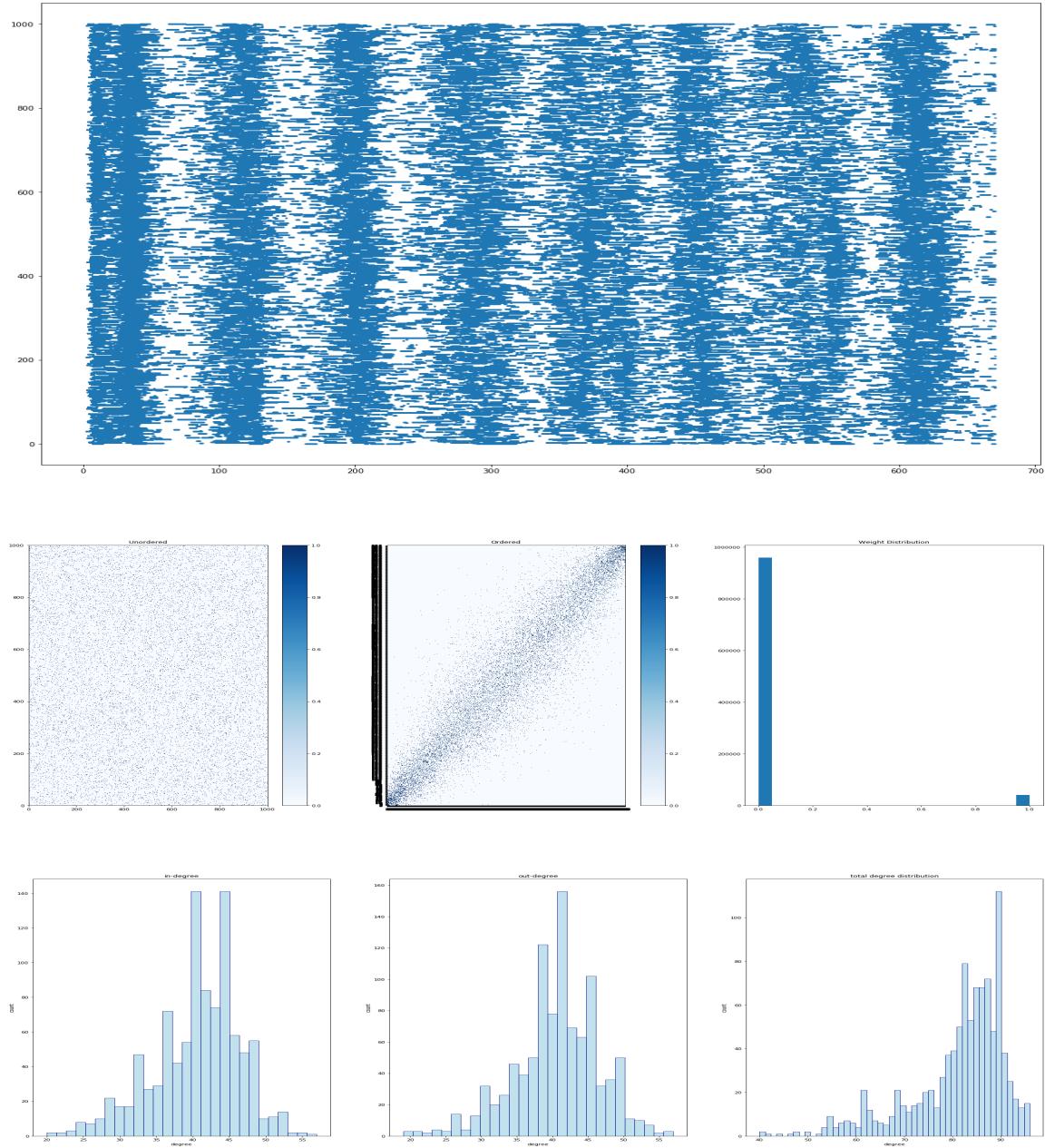
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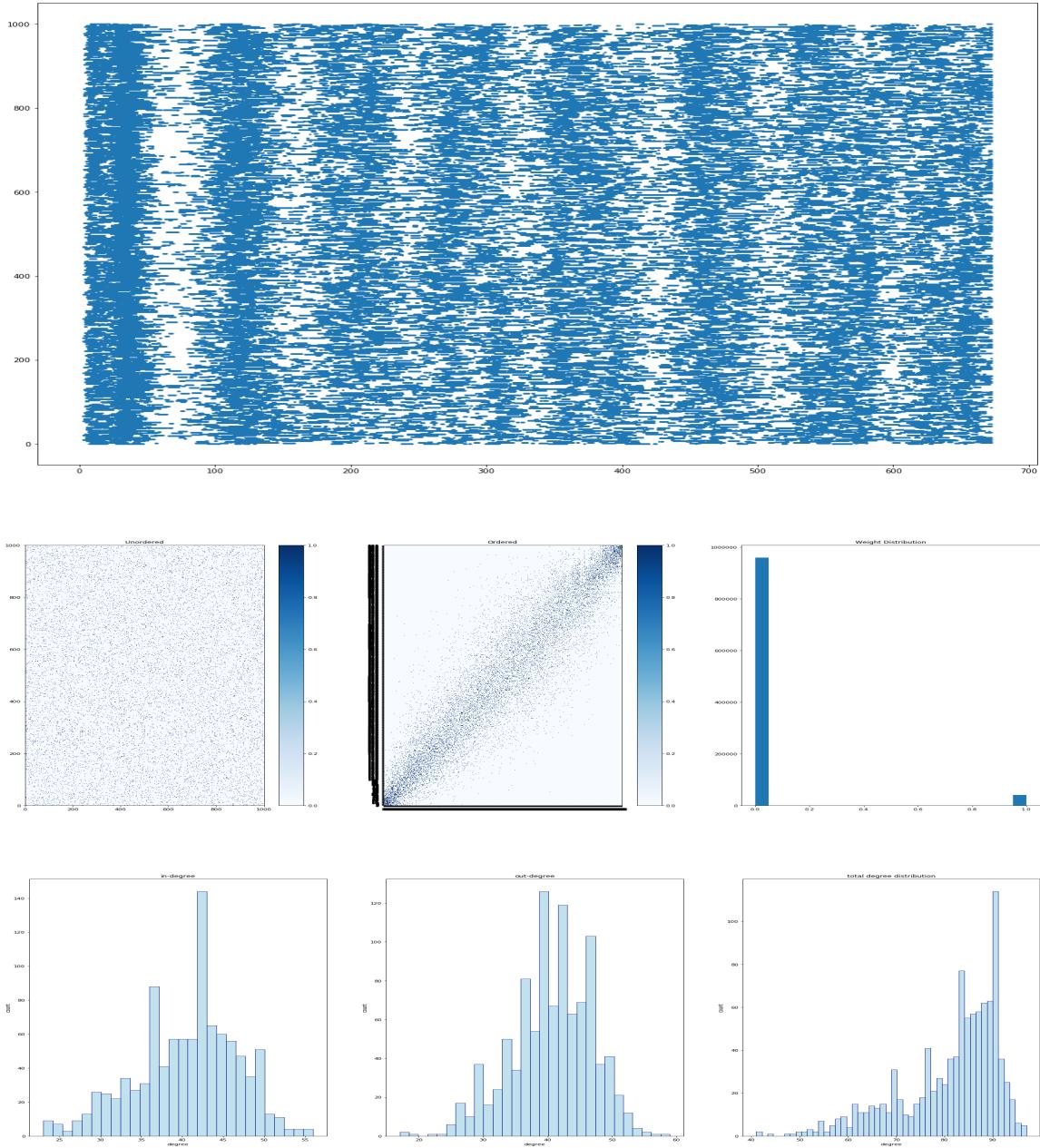
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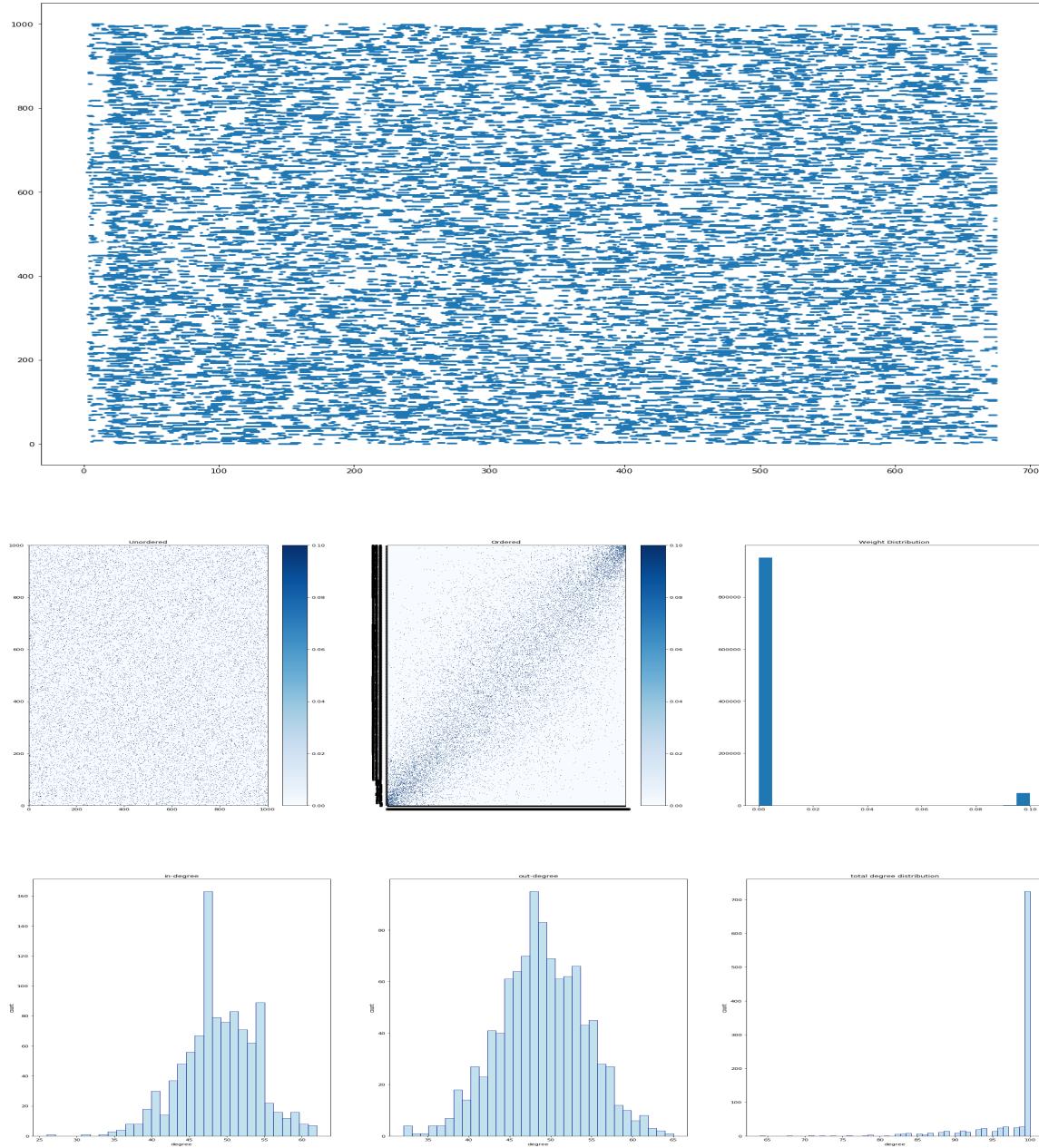
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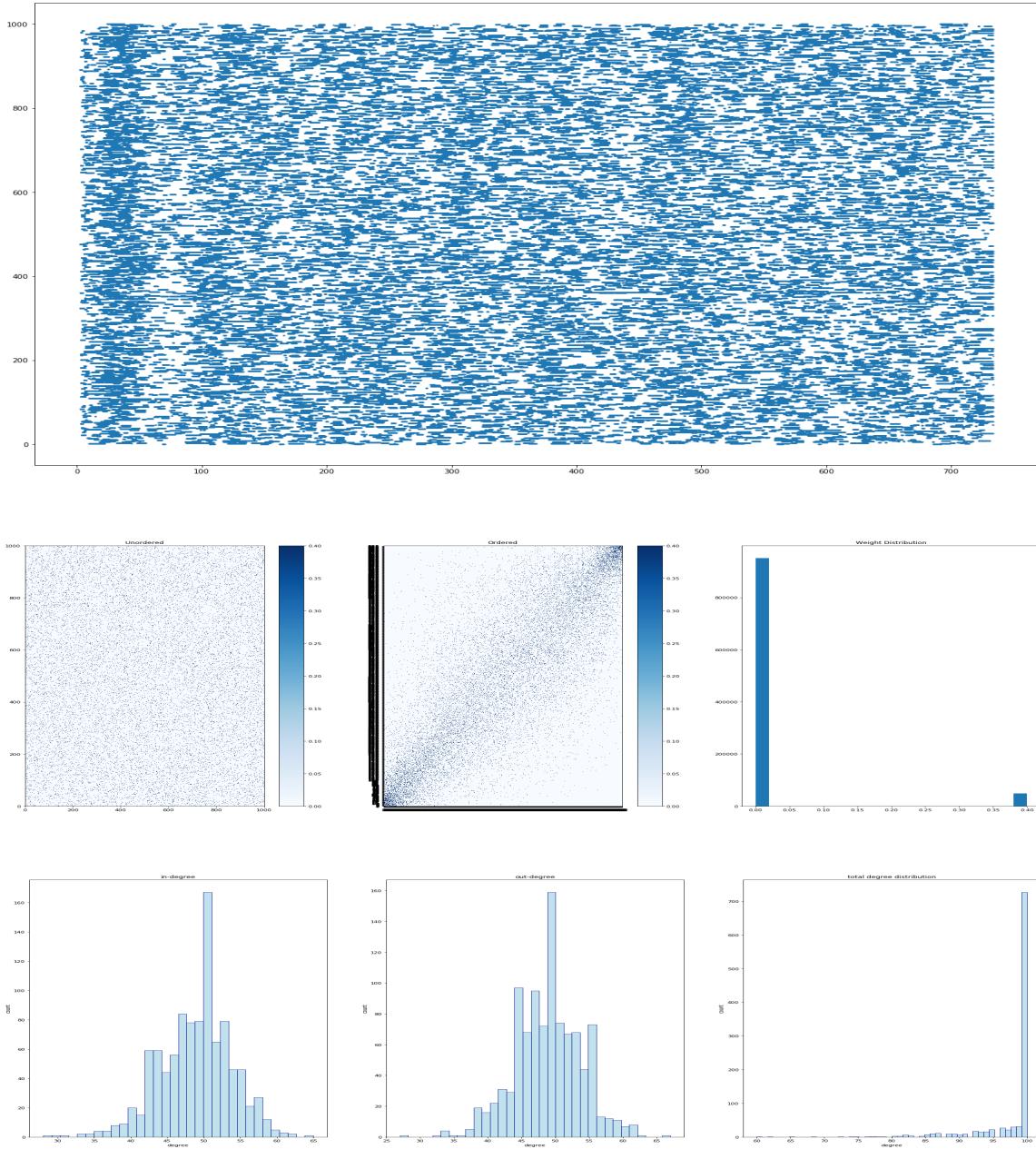
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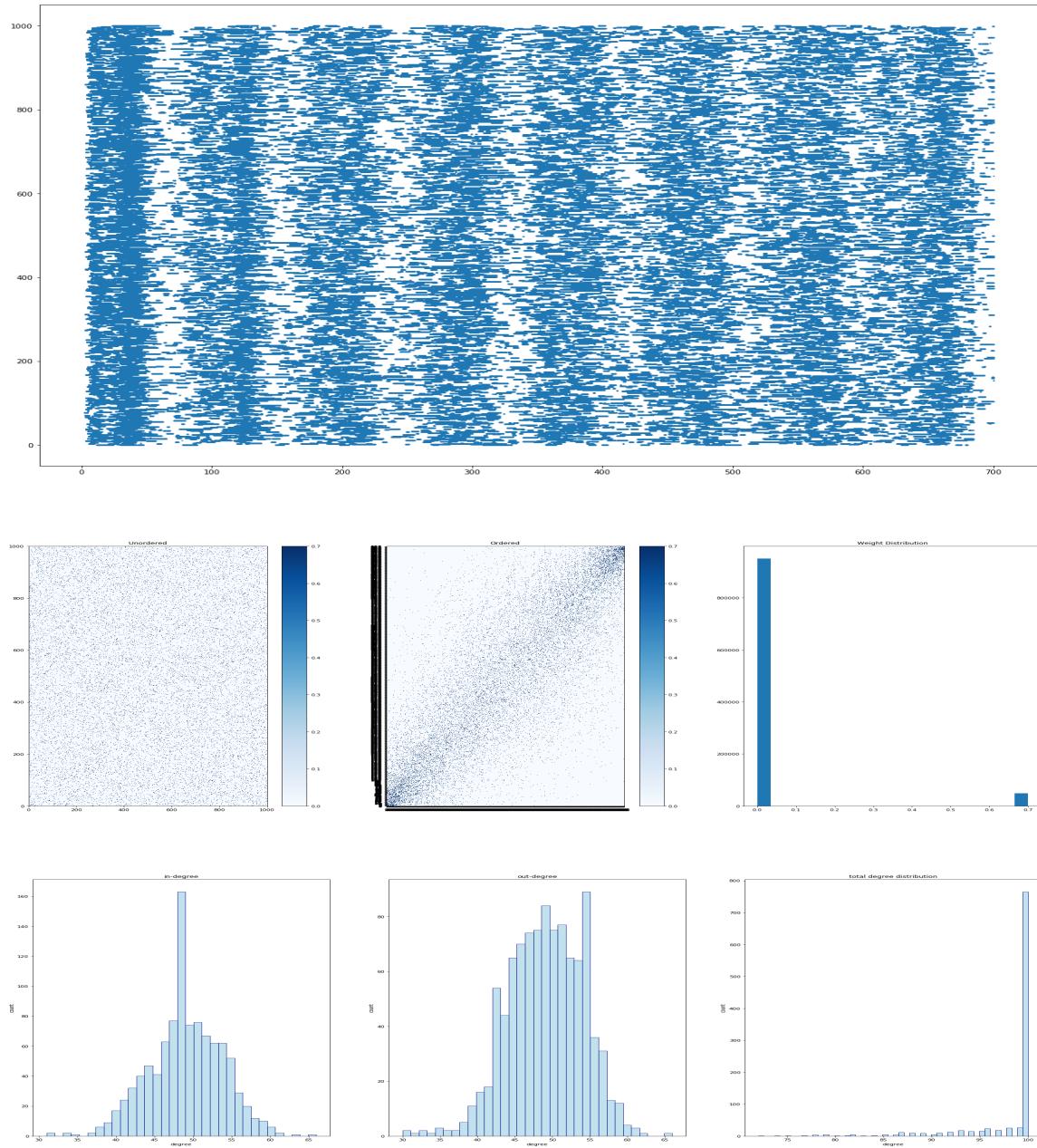
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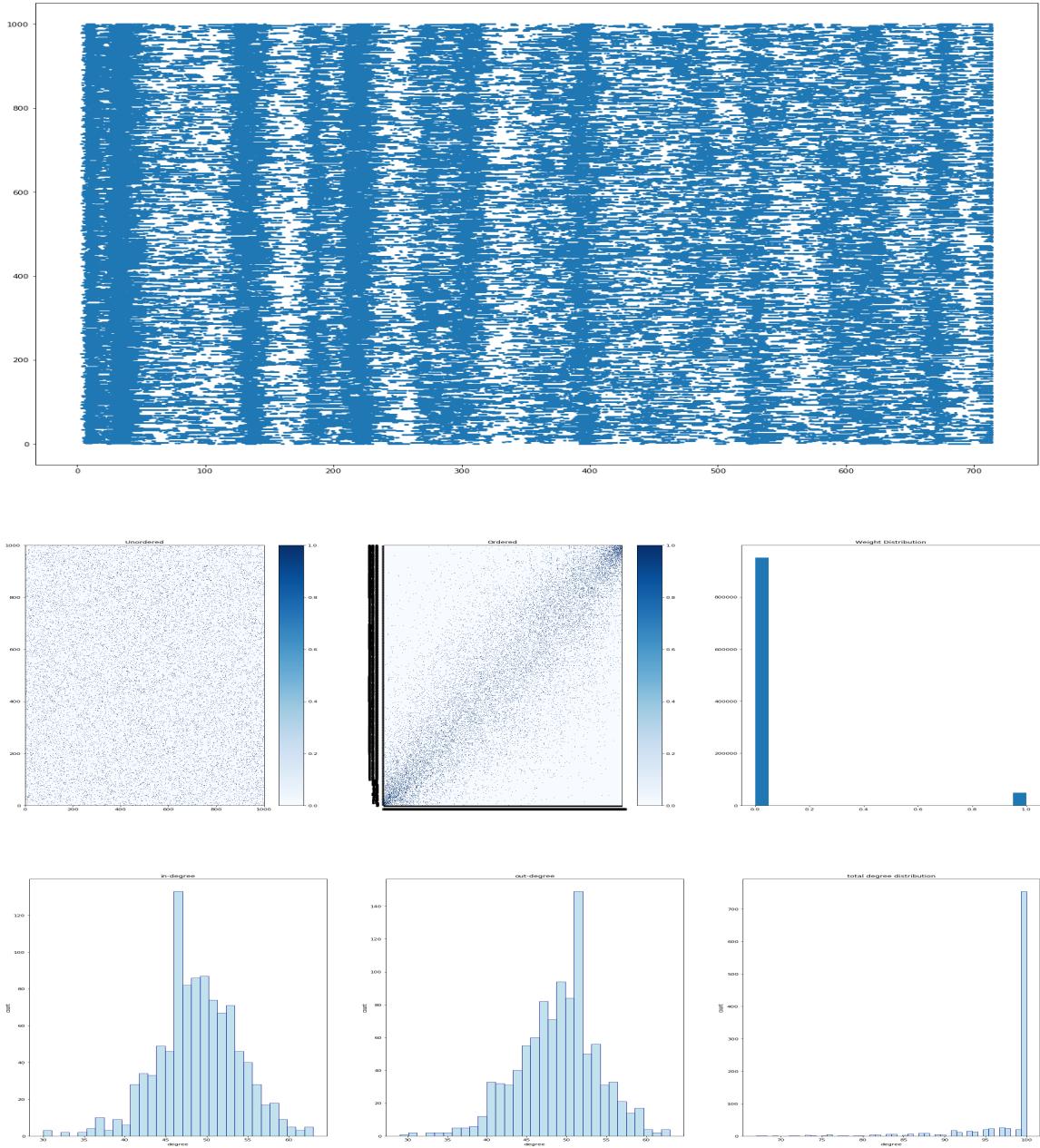
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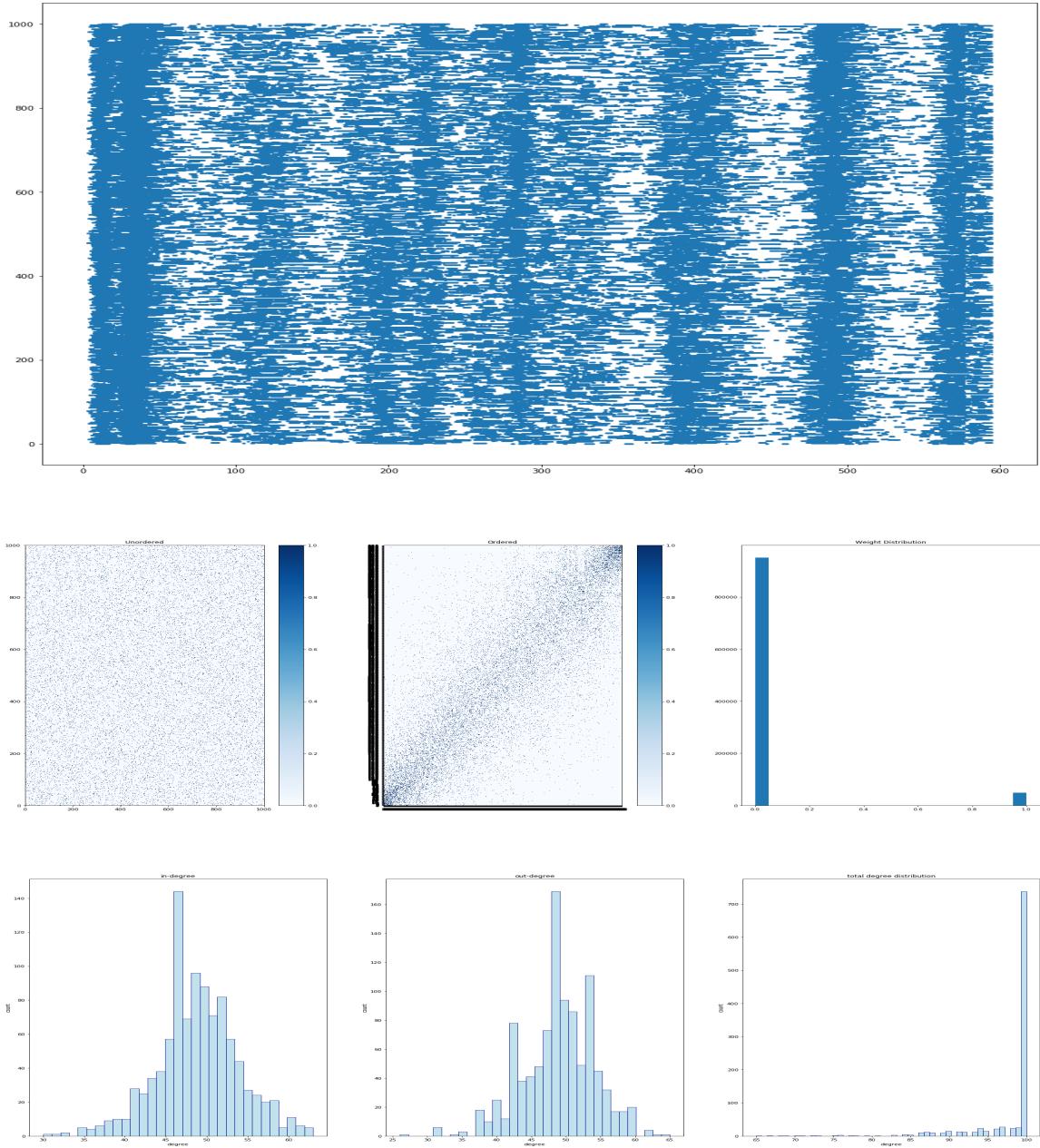
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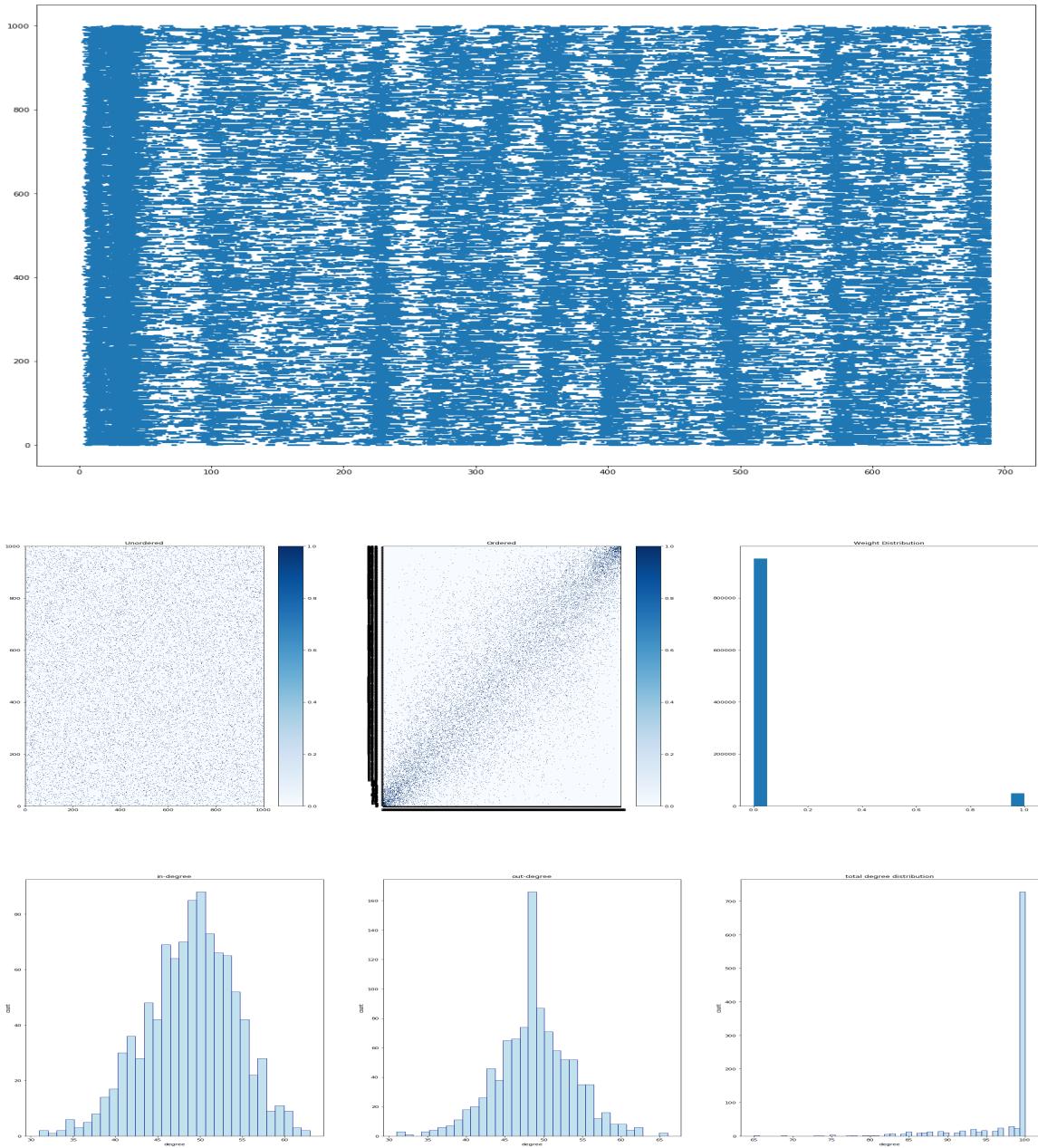
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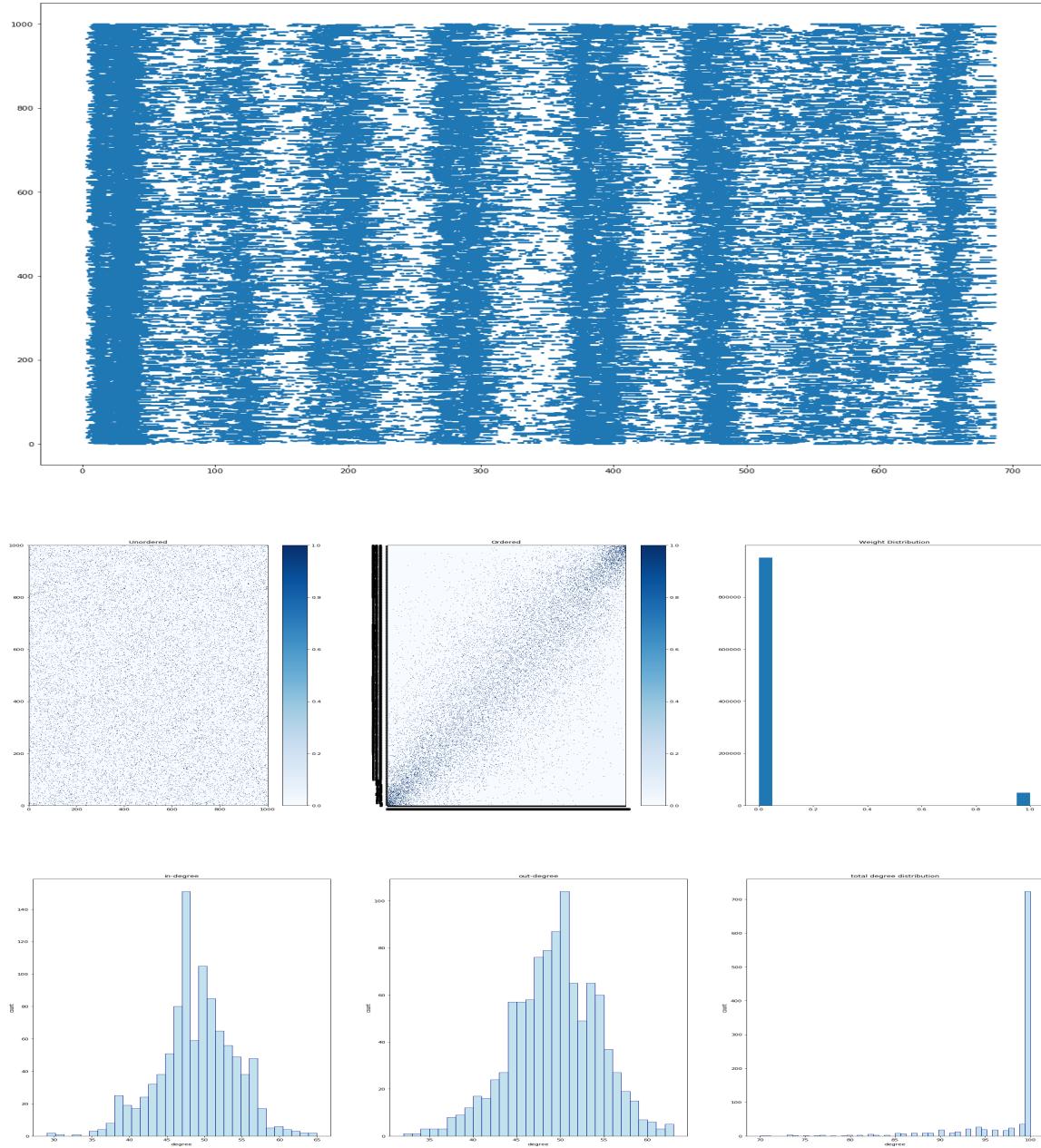
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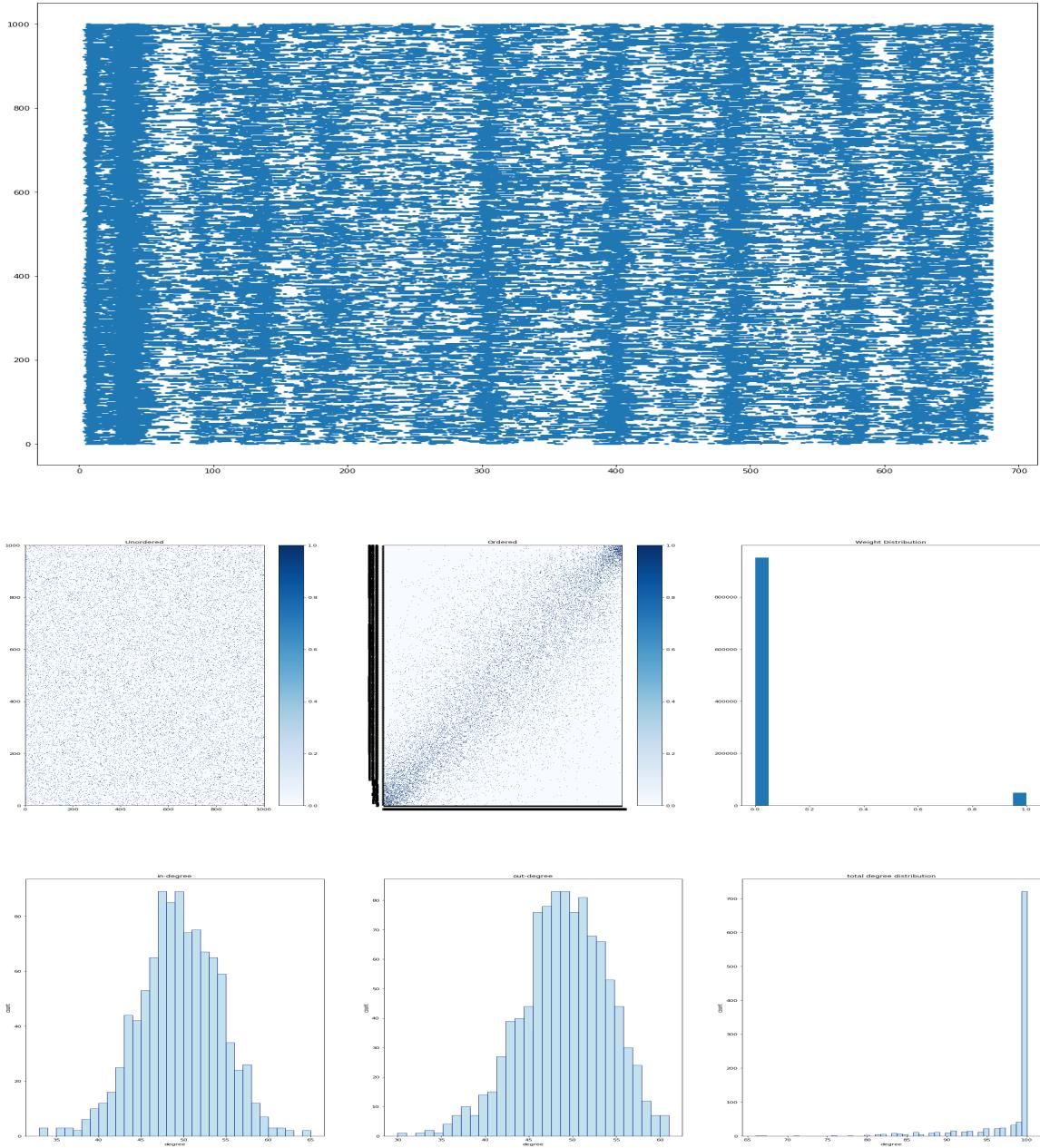
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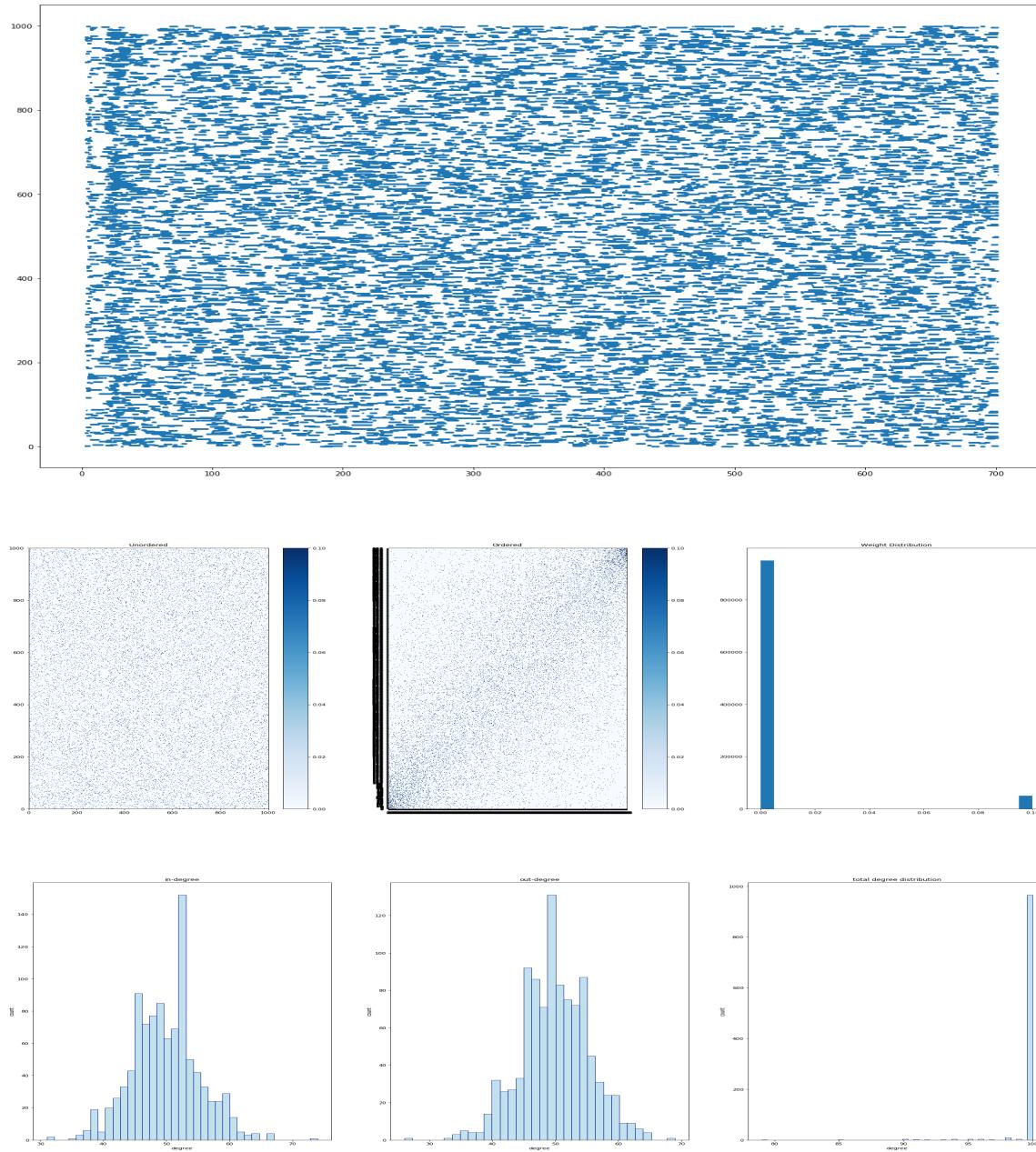
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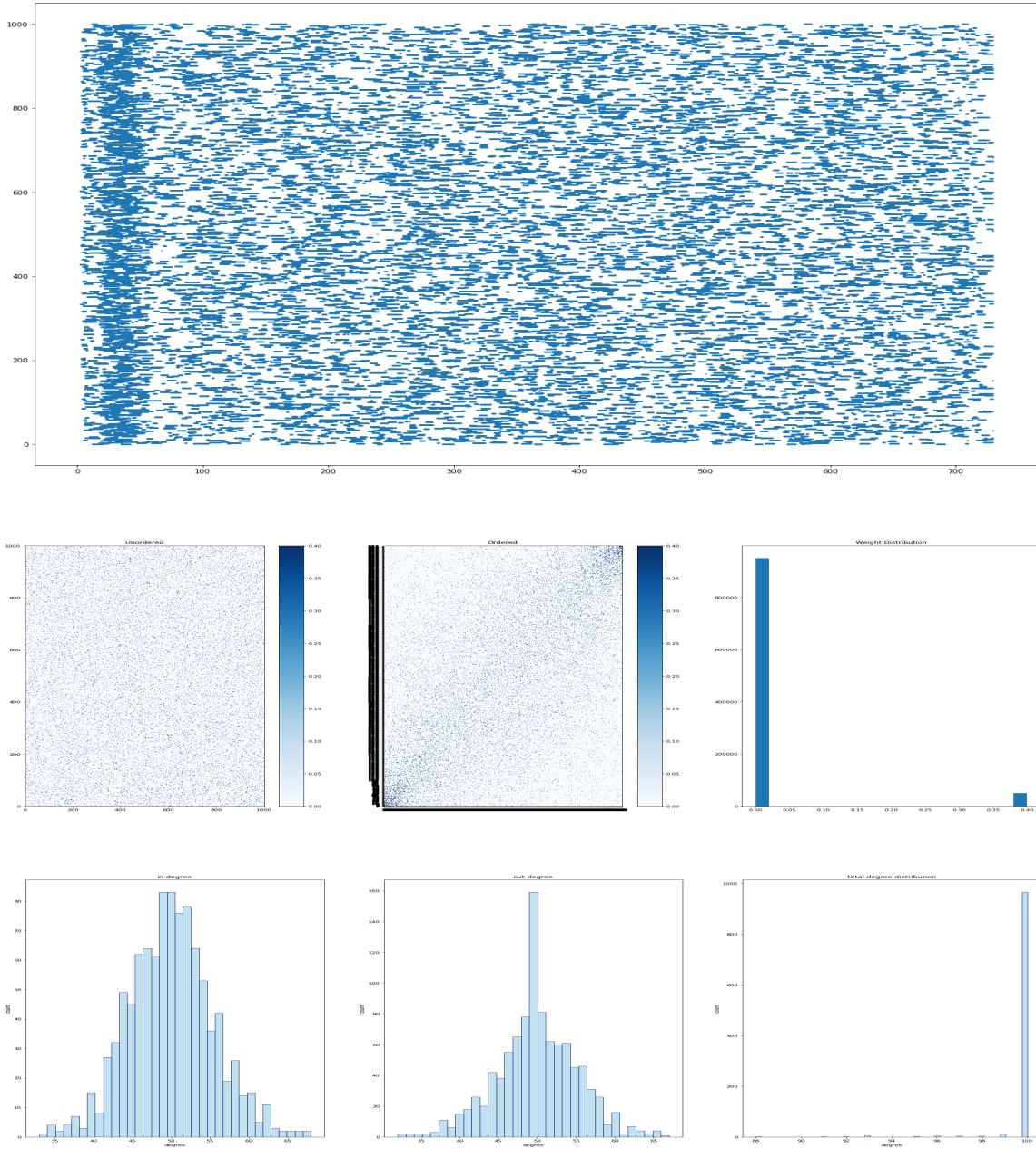
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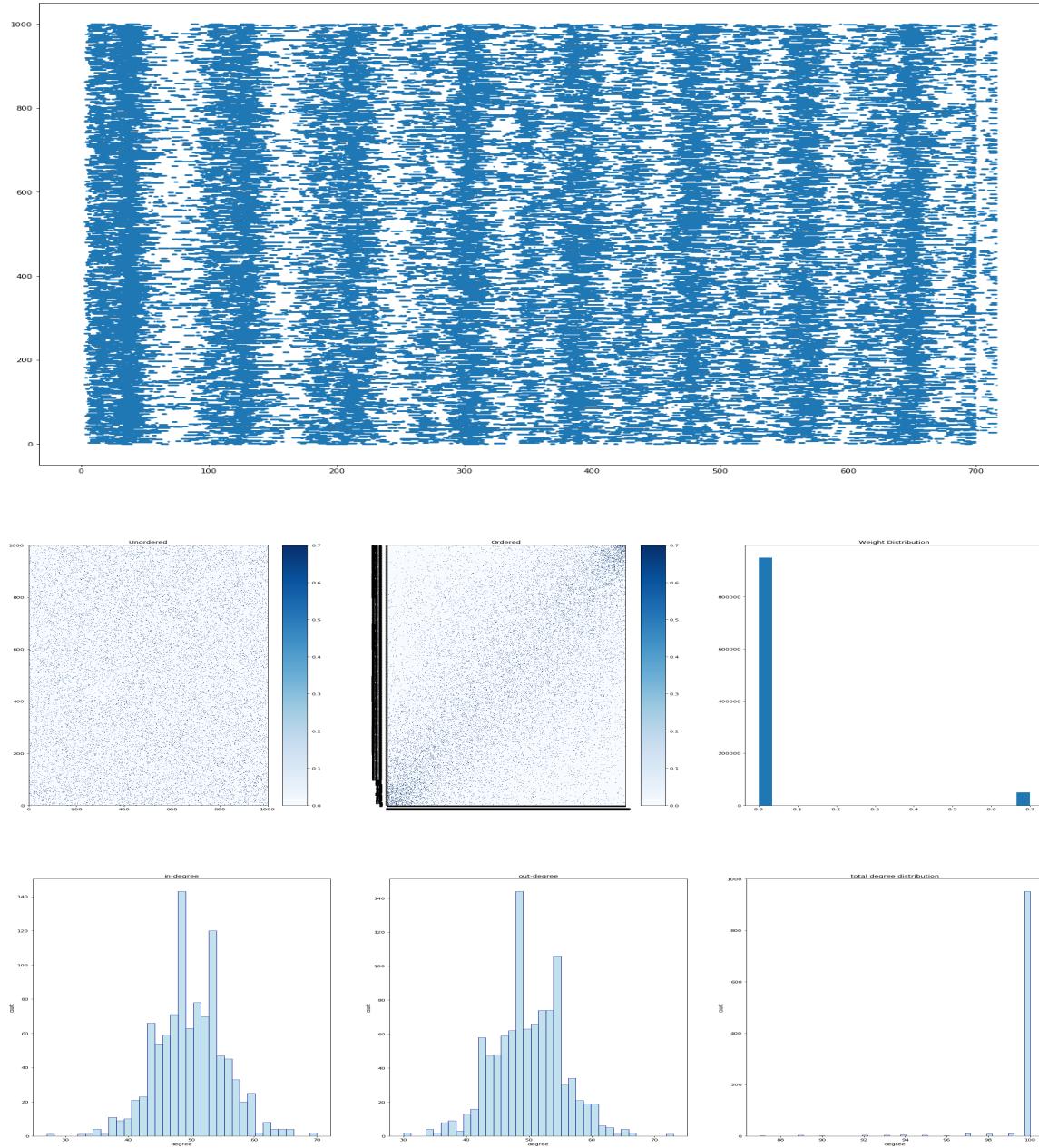
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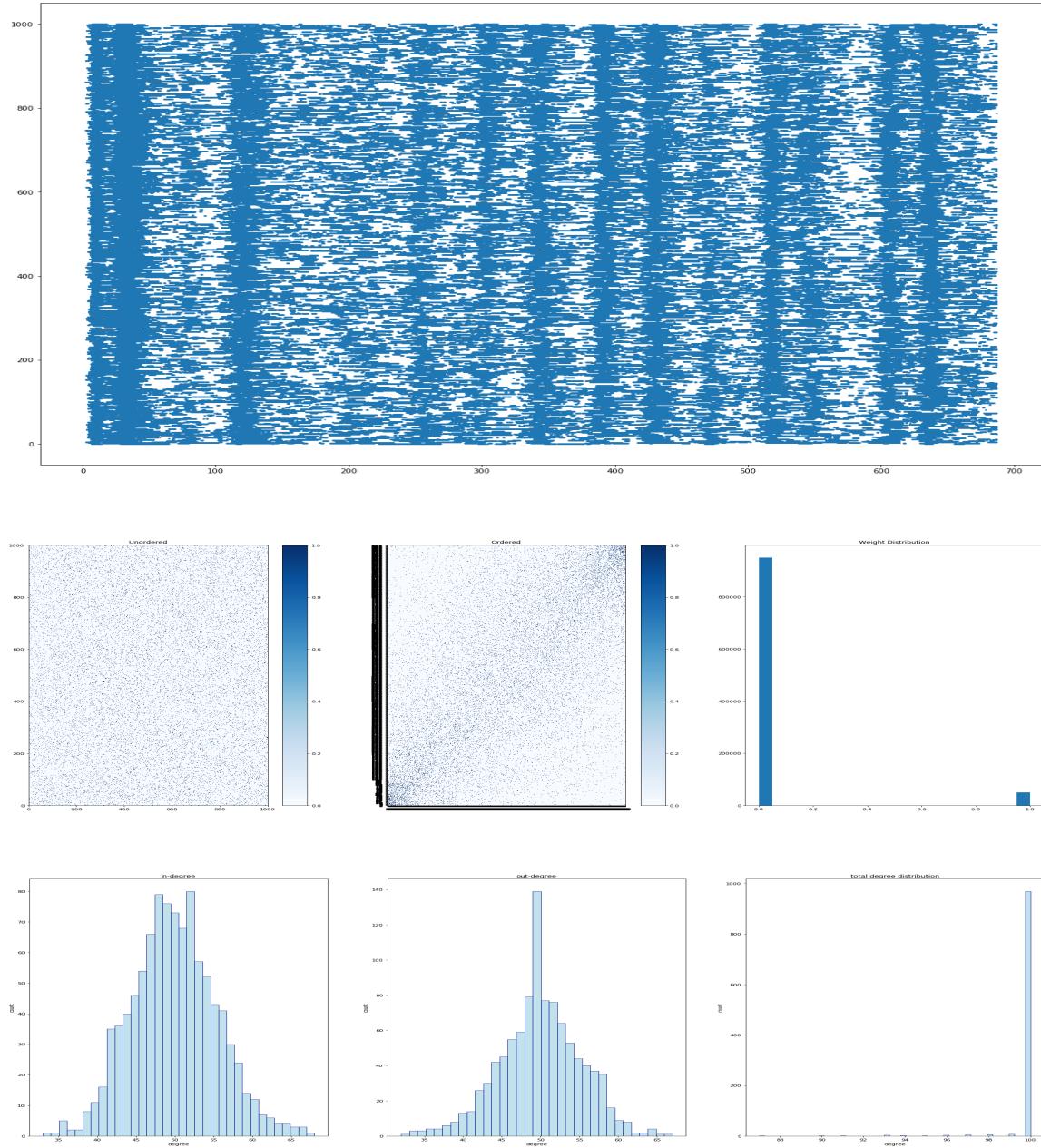
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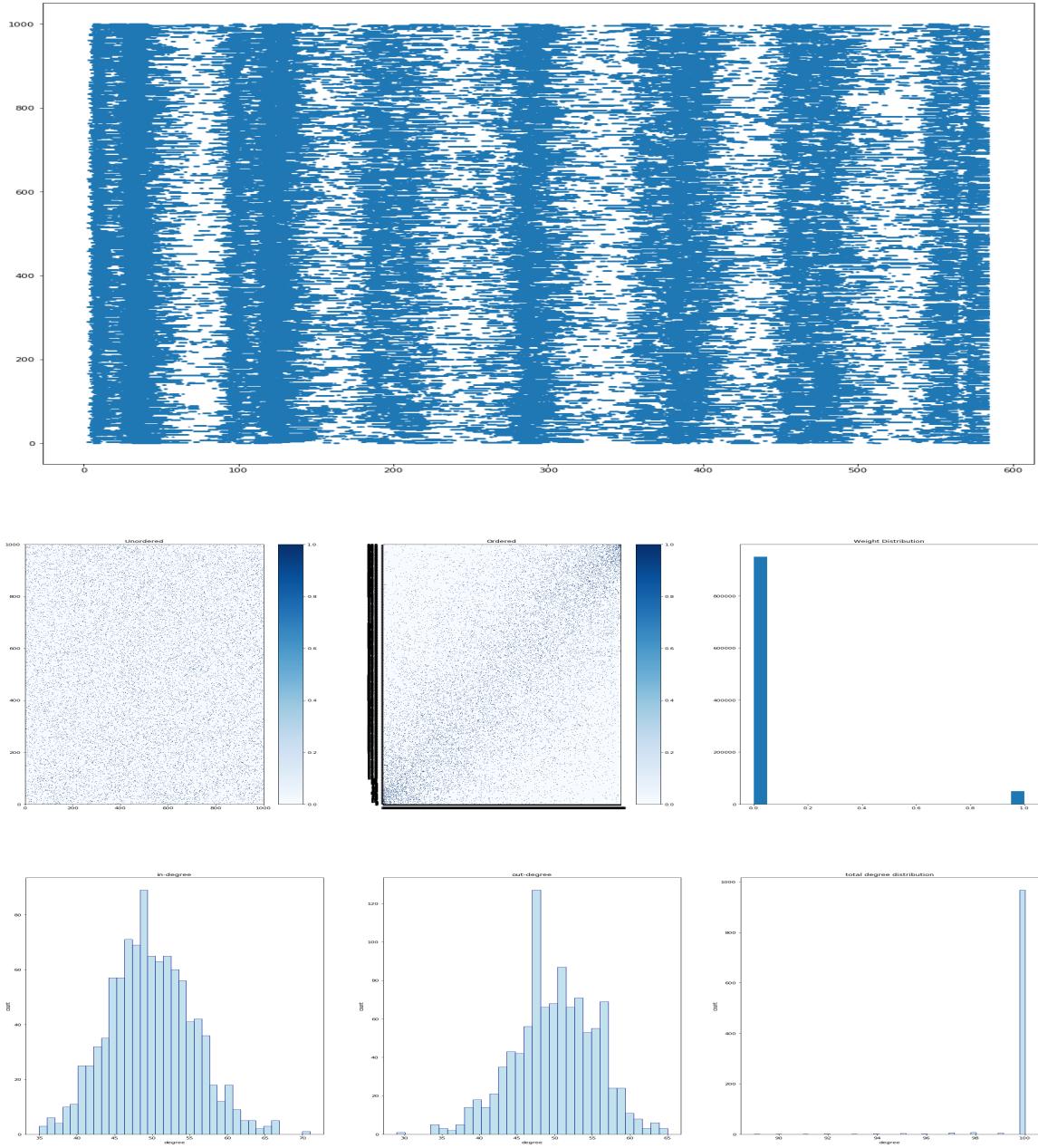
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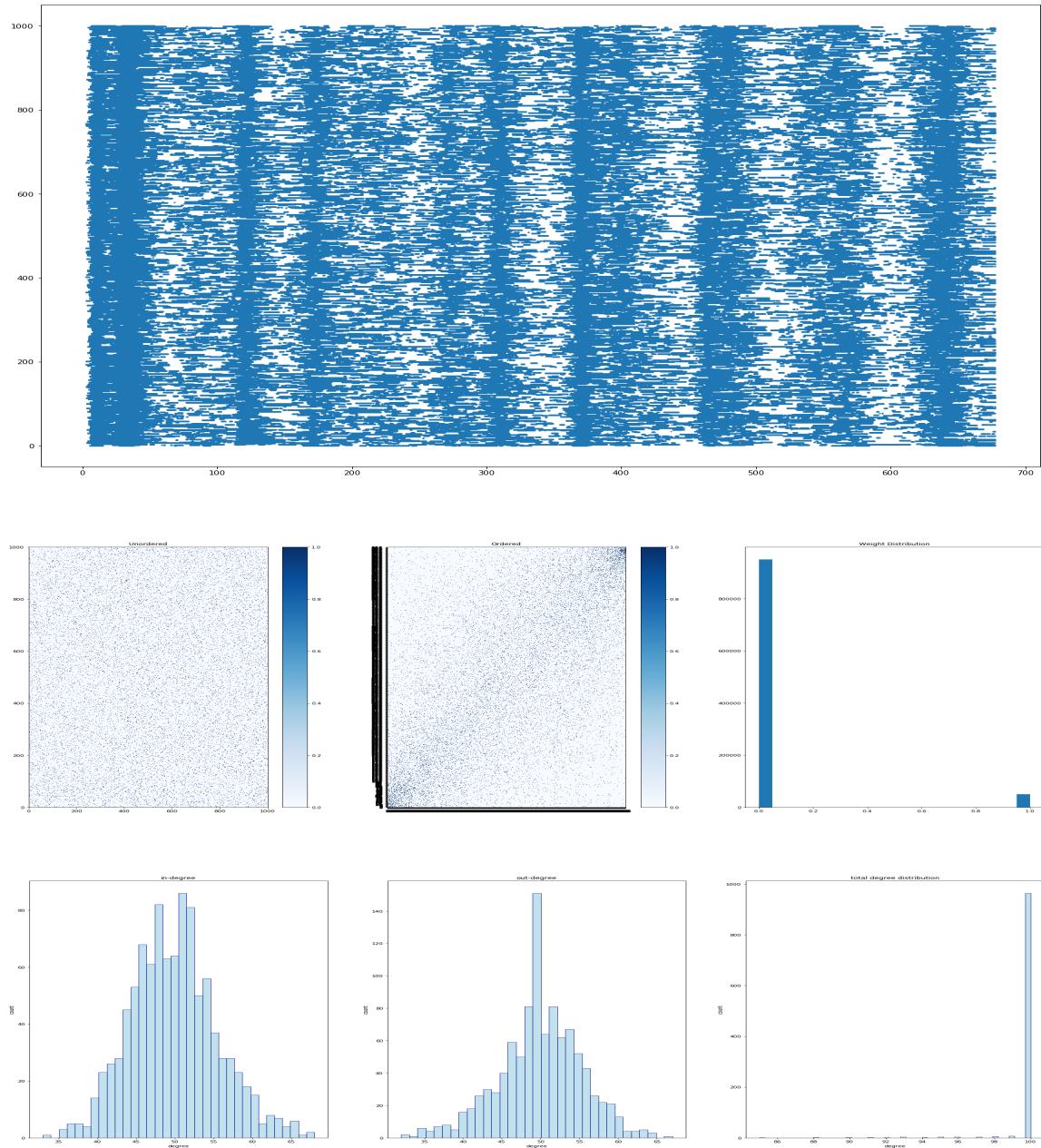
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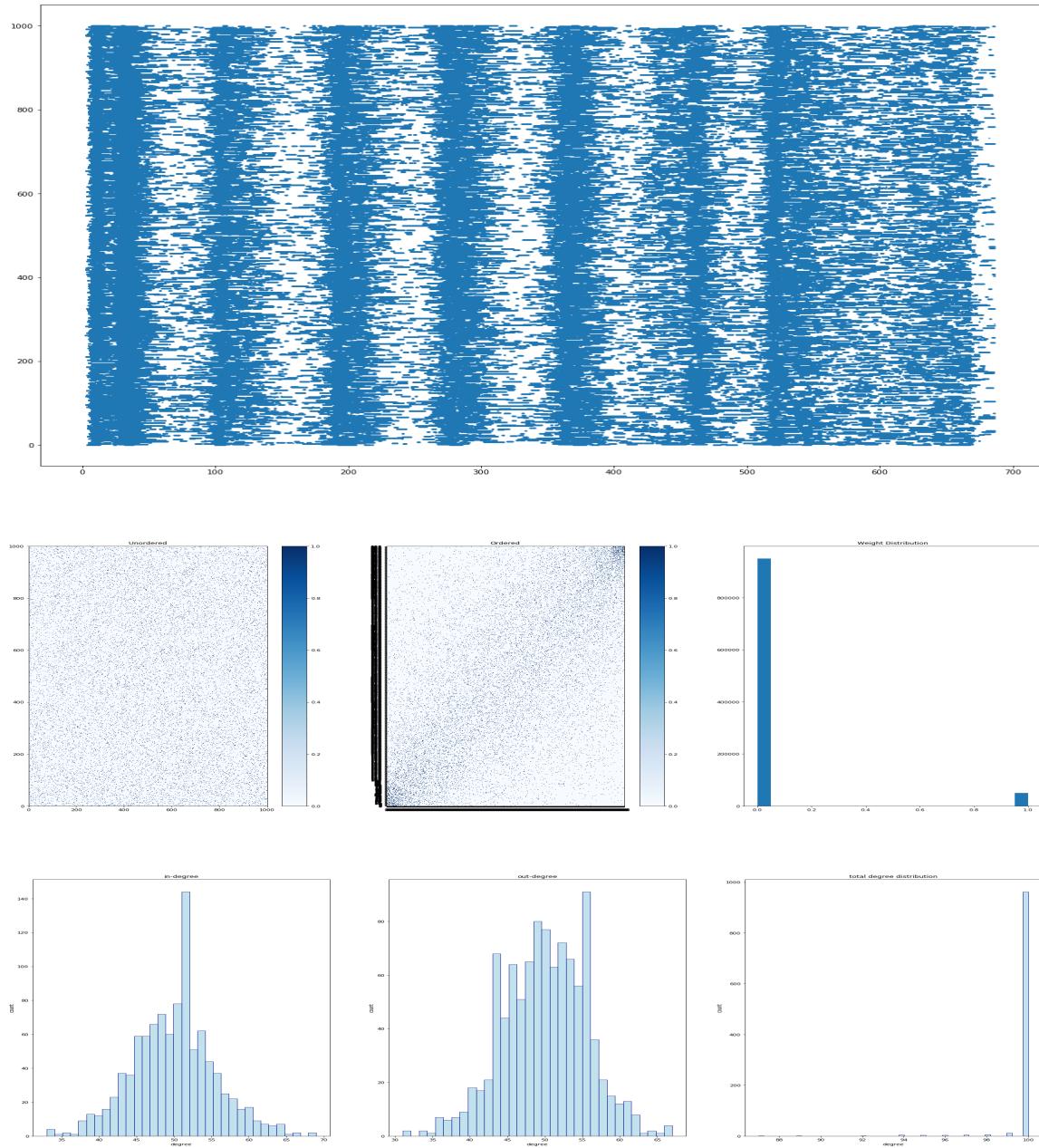
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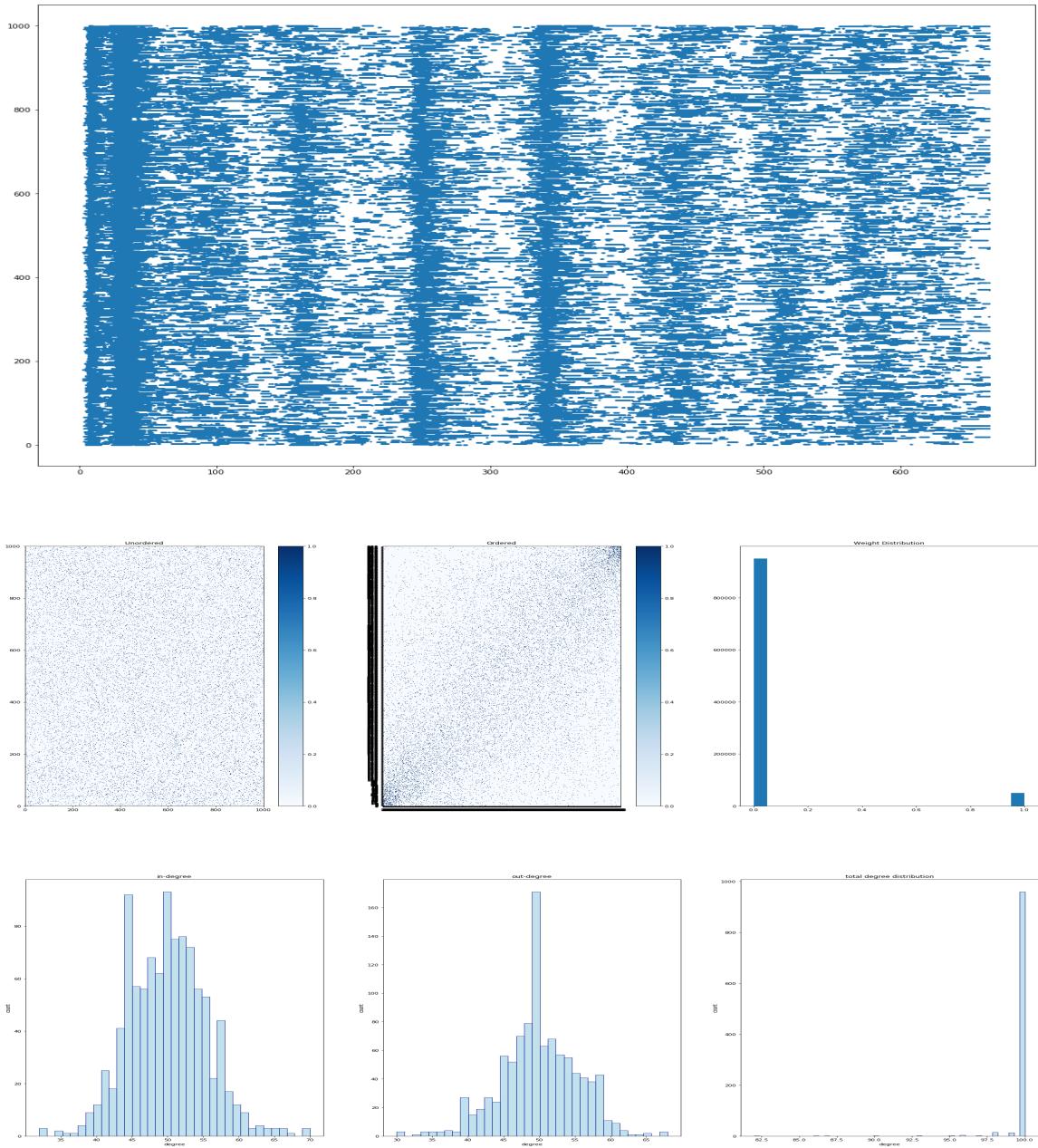
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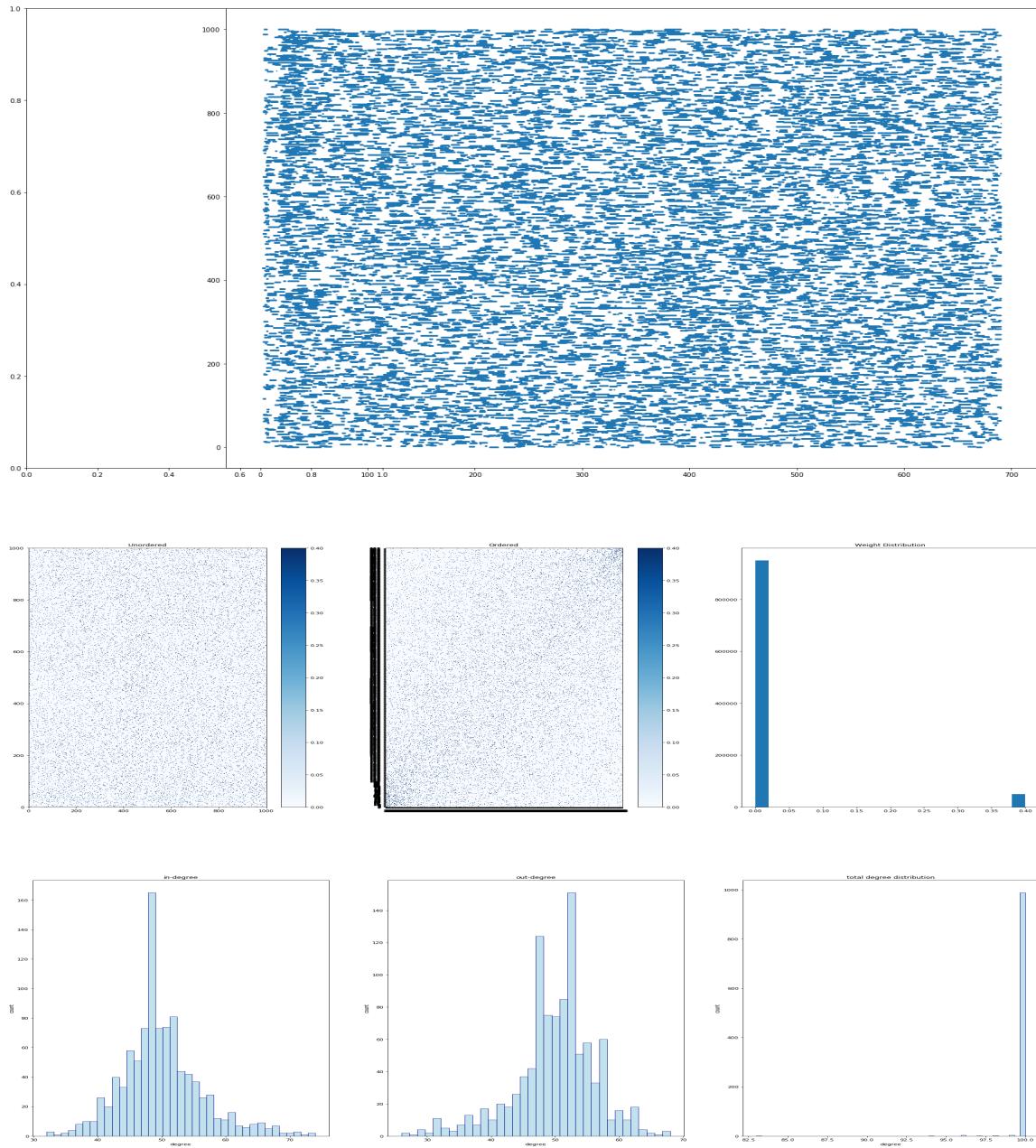
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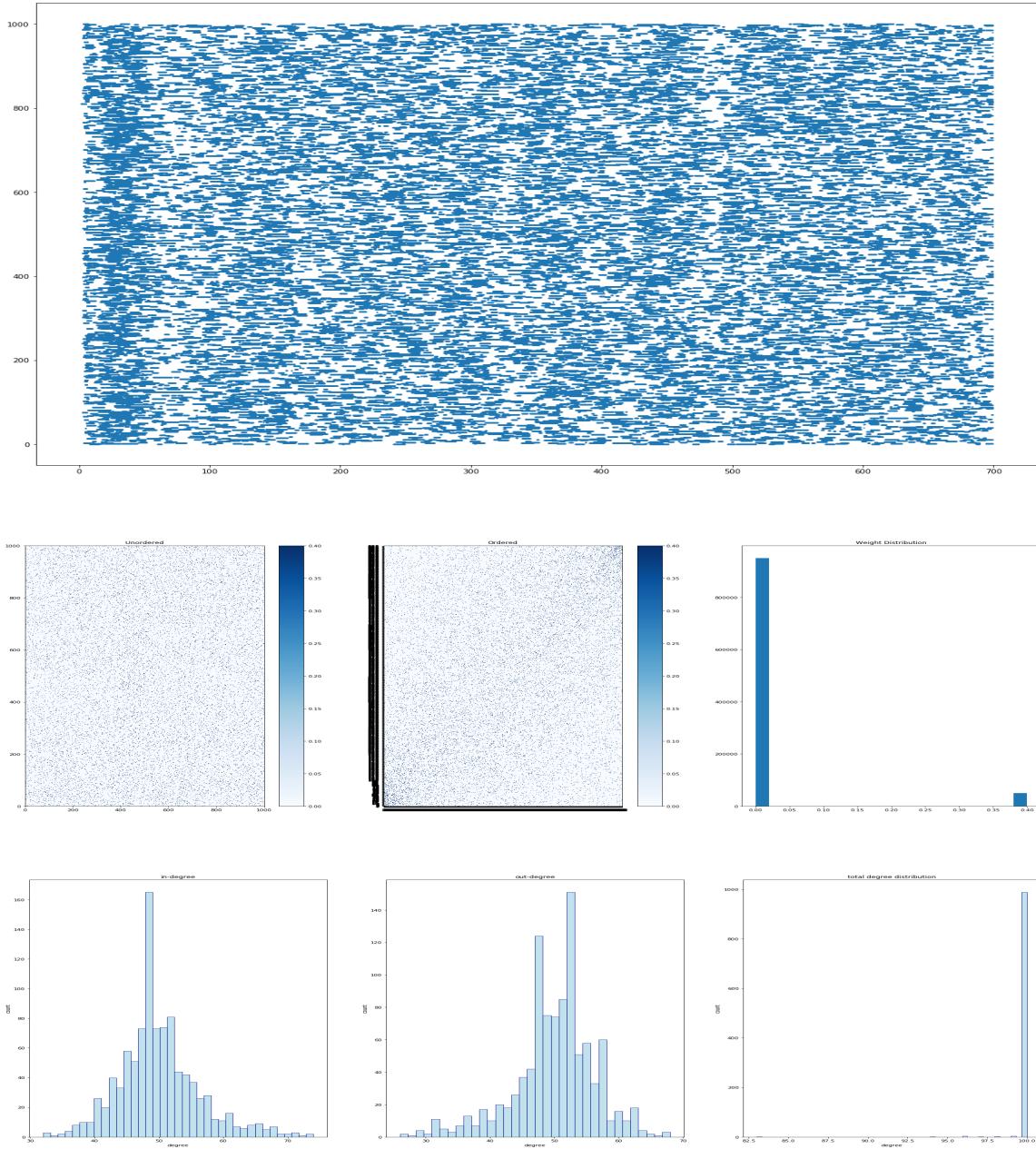
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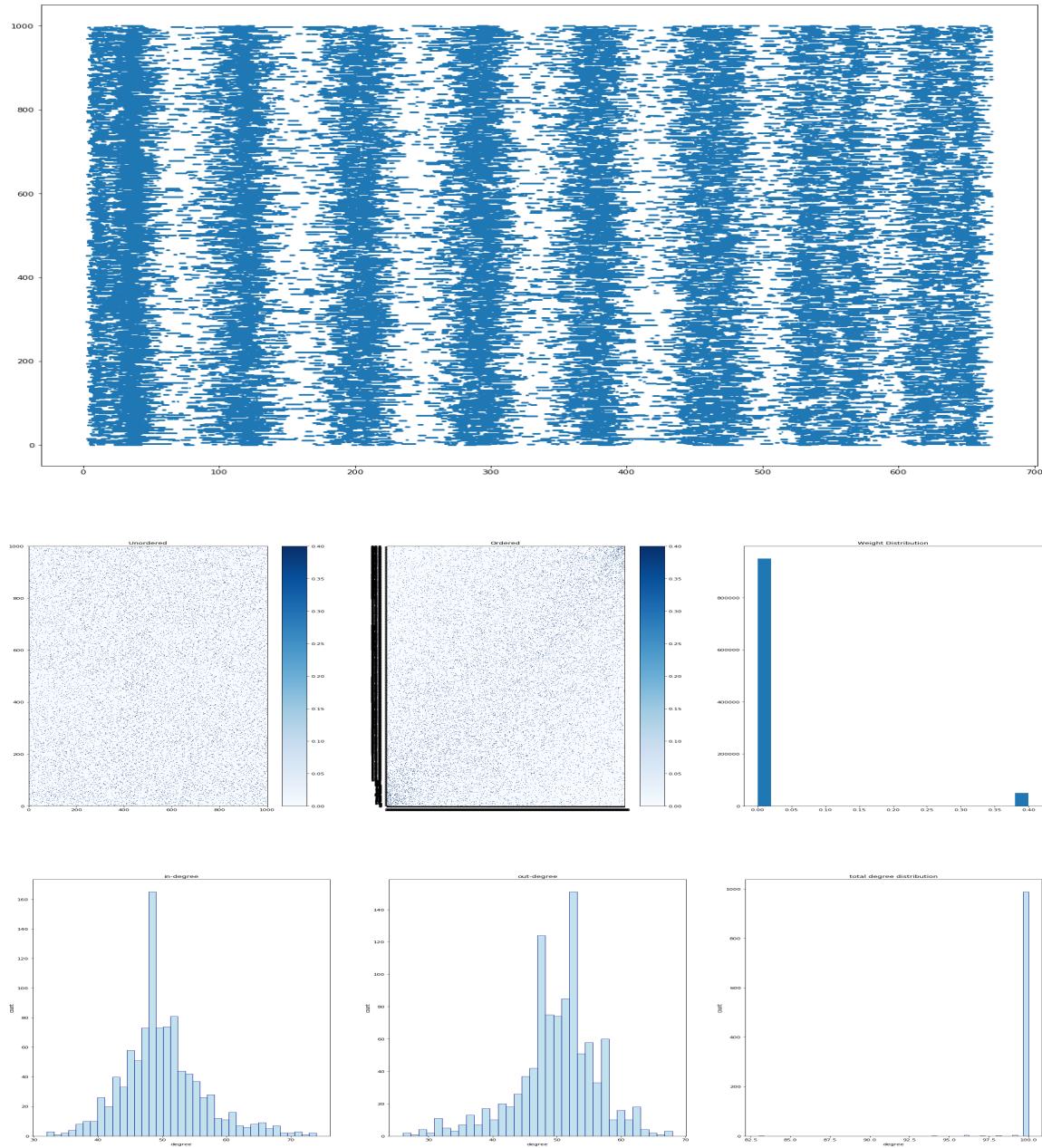
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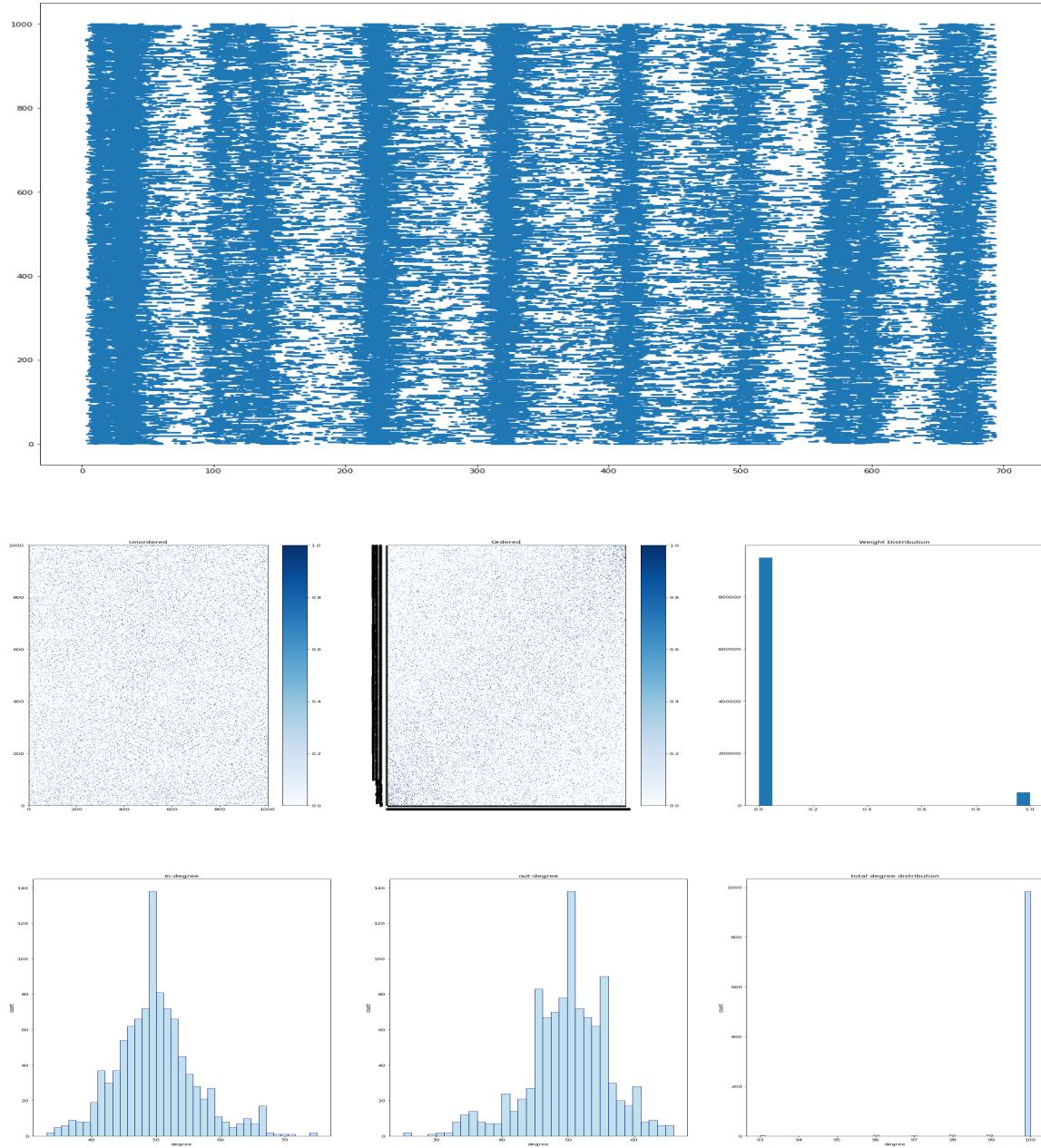
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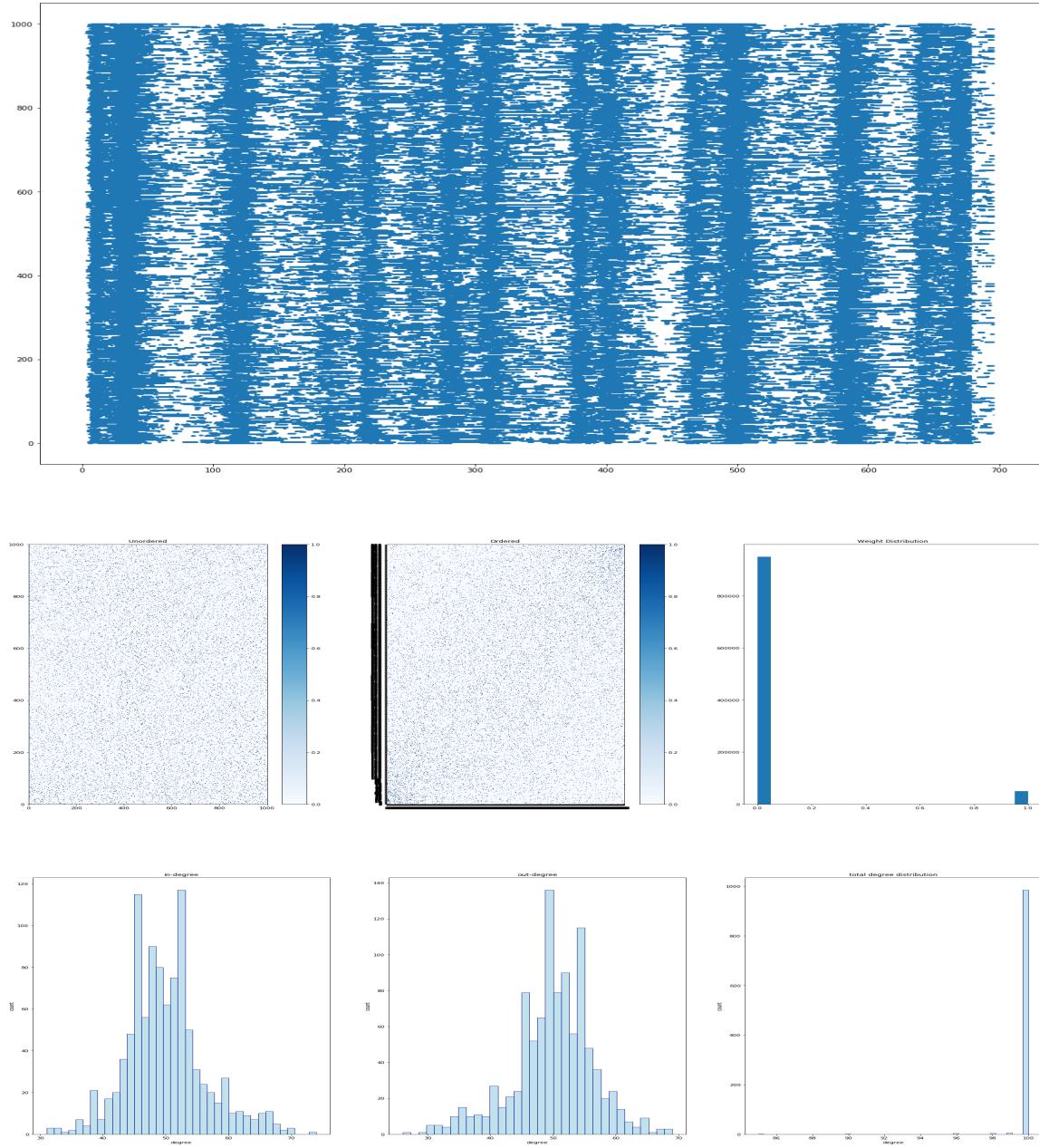
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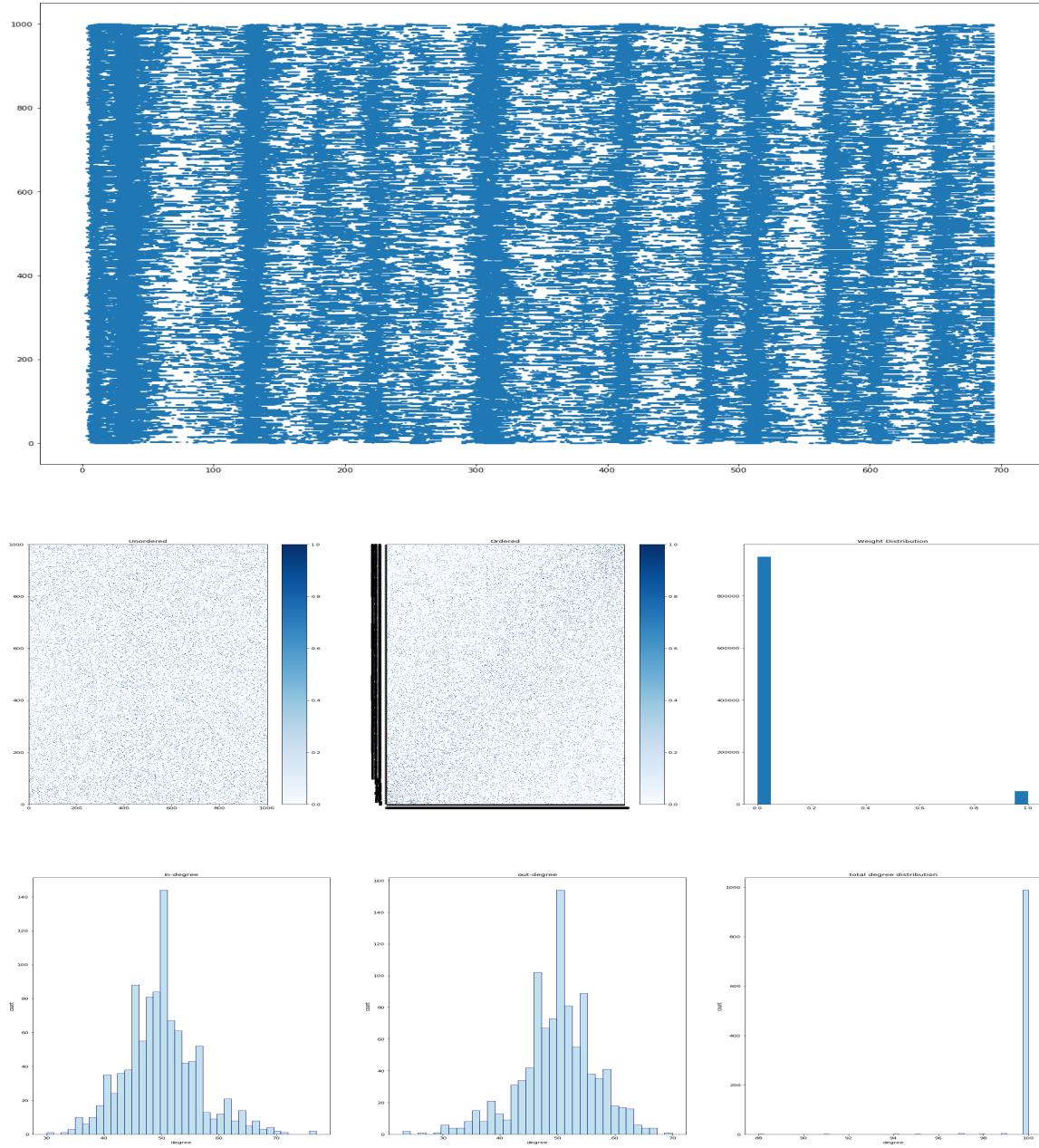
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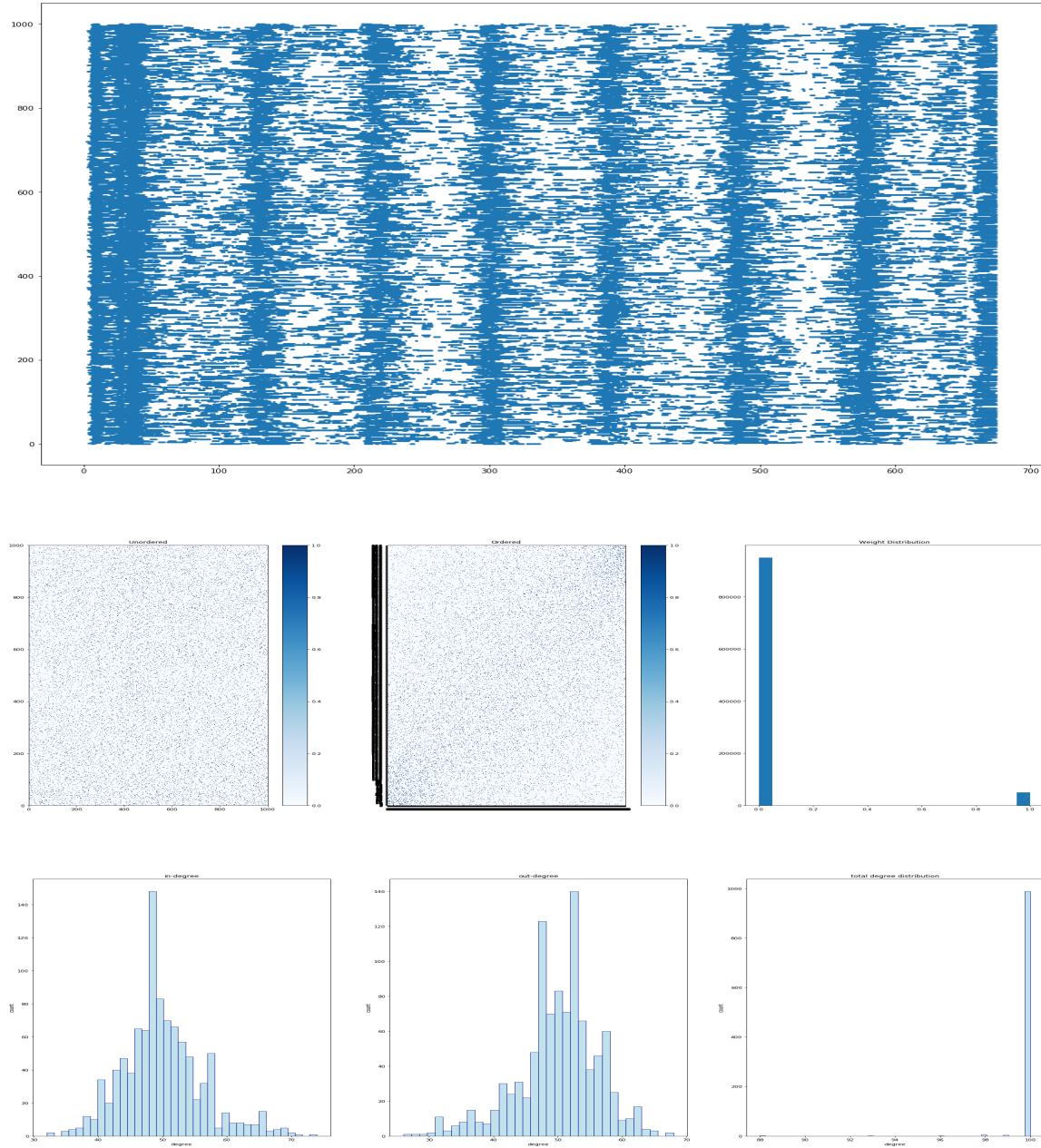
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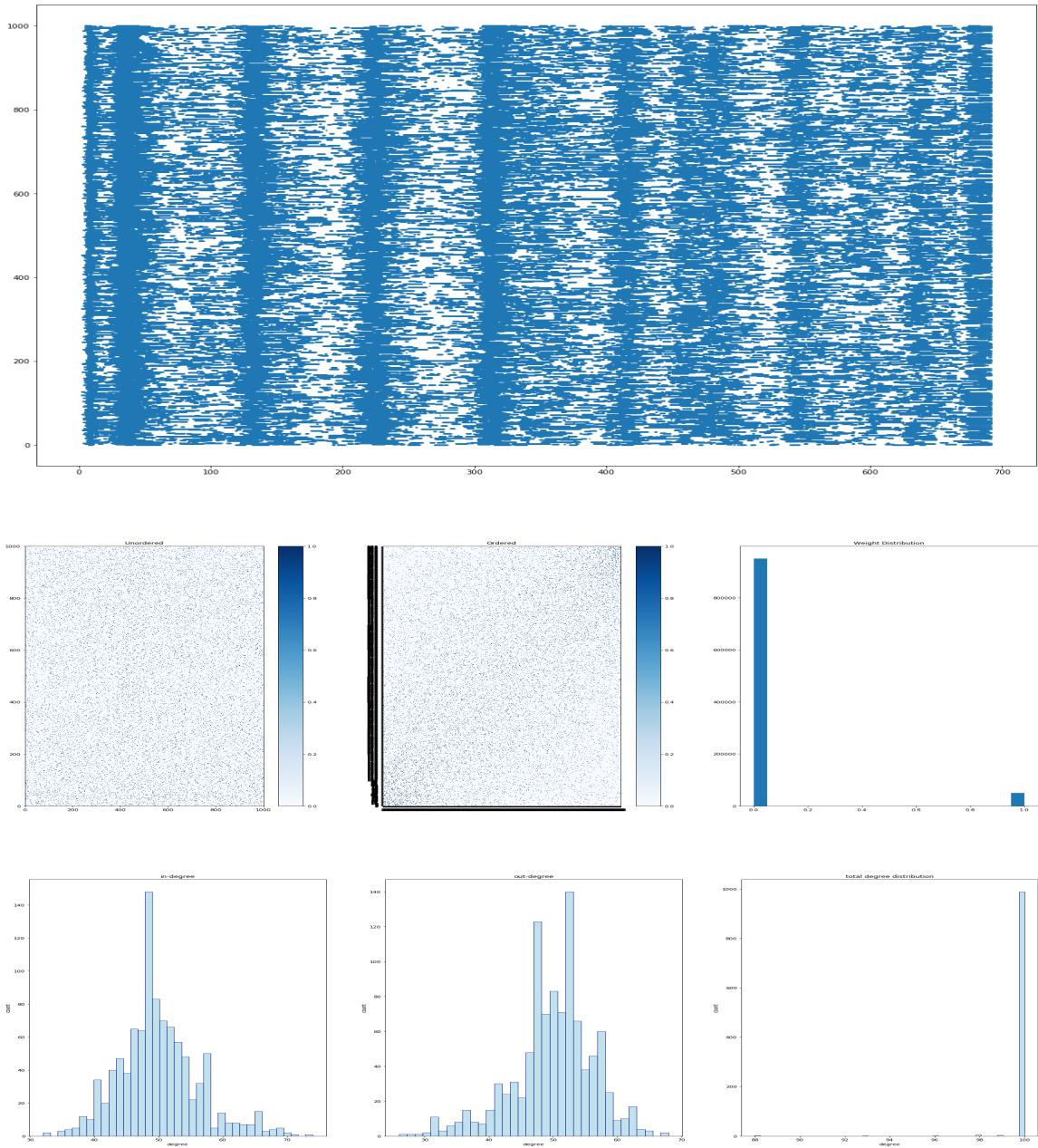
## 2.30 Spatial Scale=40, Development Time=180



## 2.31 Spatial Scale=40, Development Time=200



## 2.32 Spatial Scale=40, Development Time=220



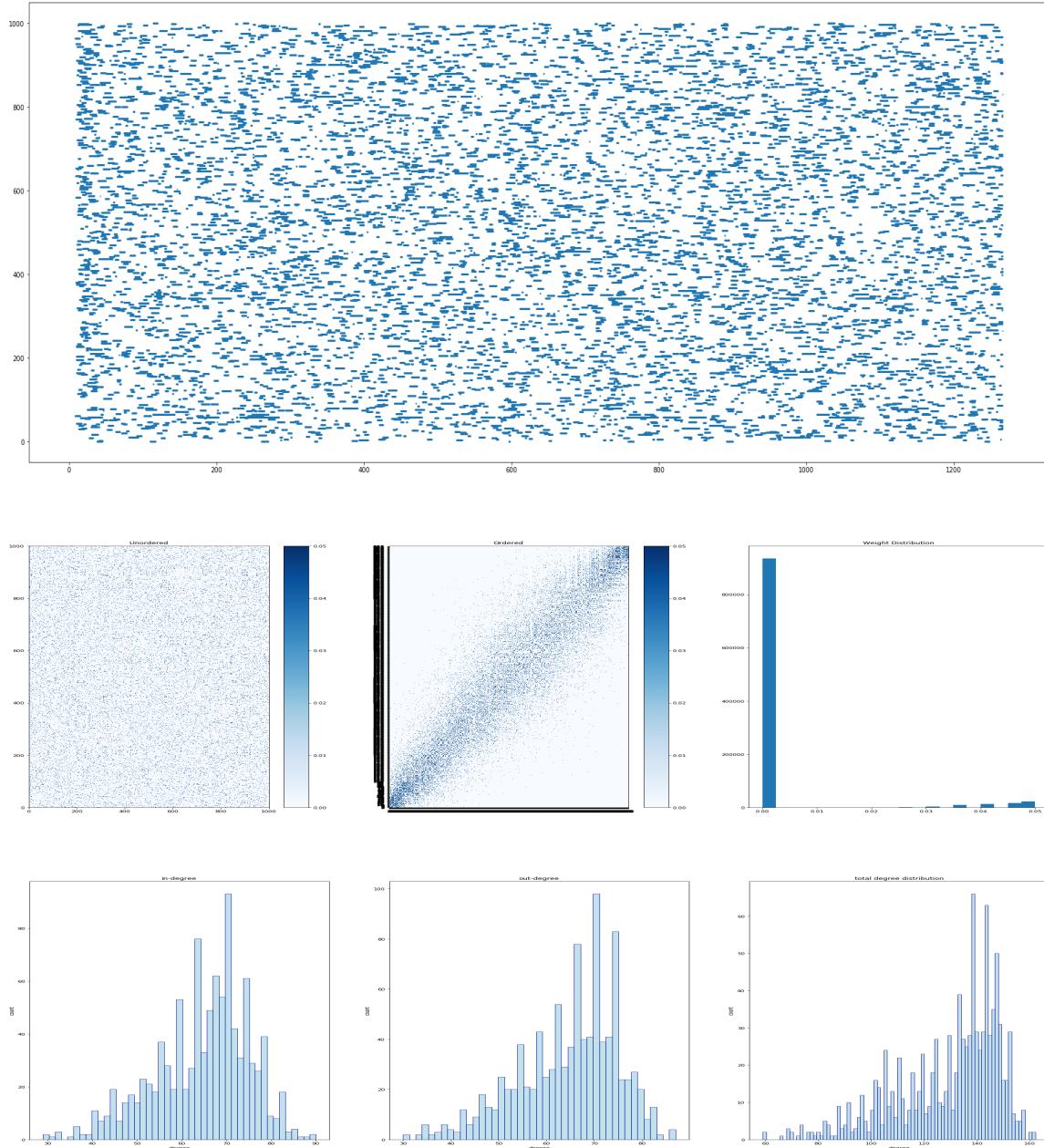
### 3 Synapse Limit: 200

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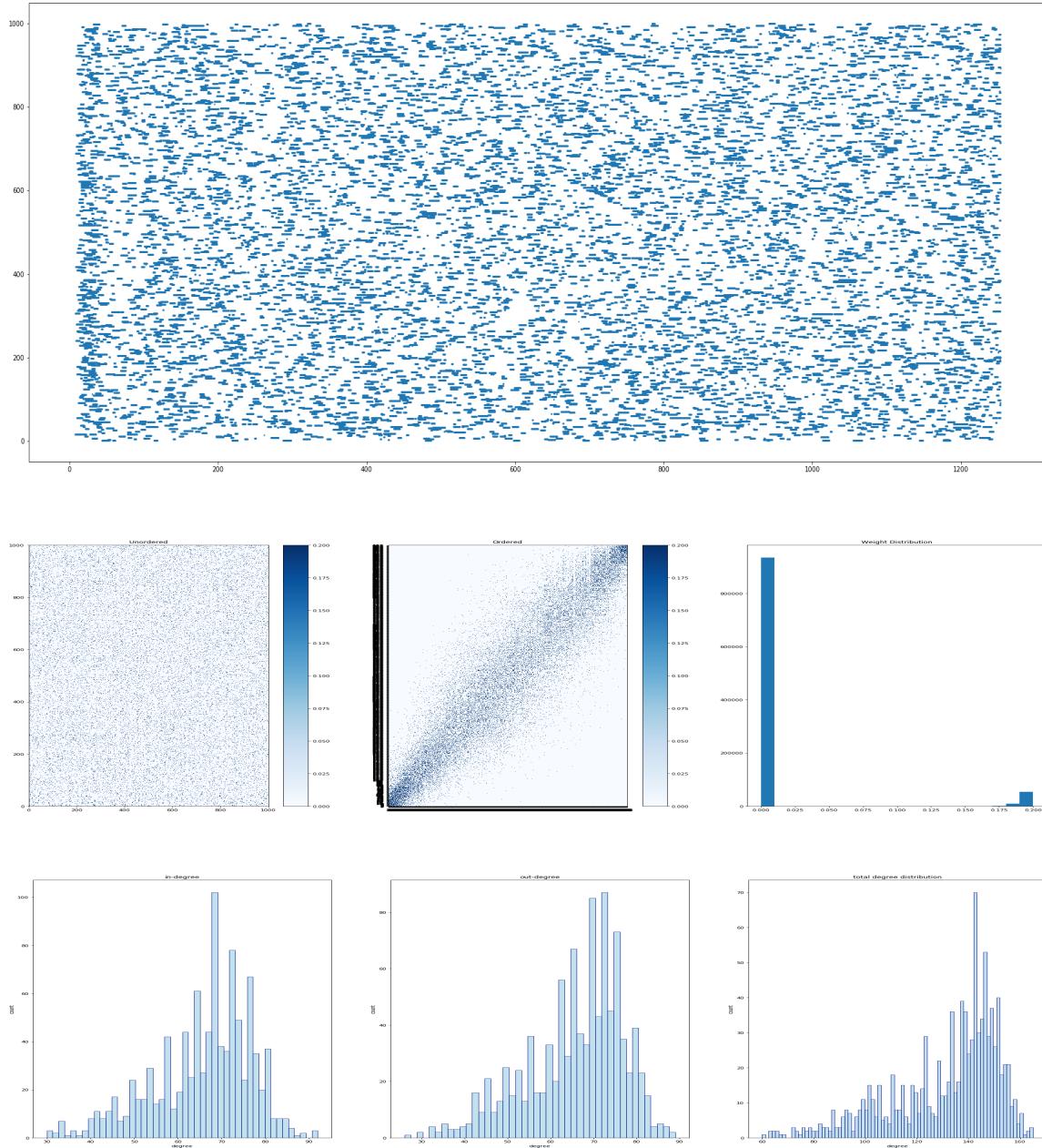
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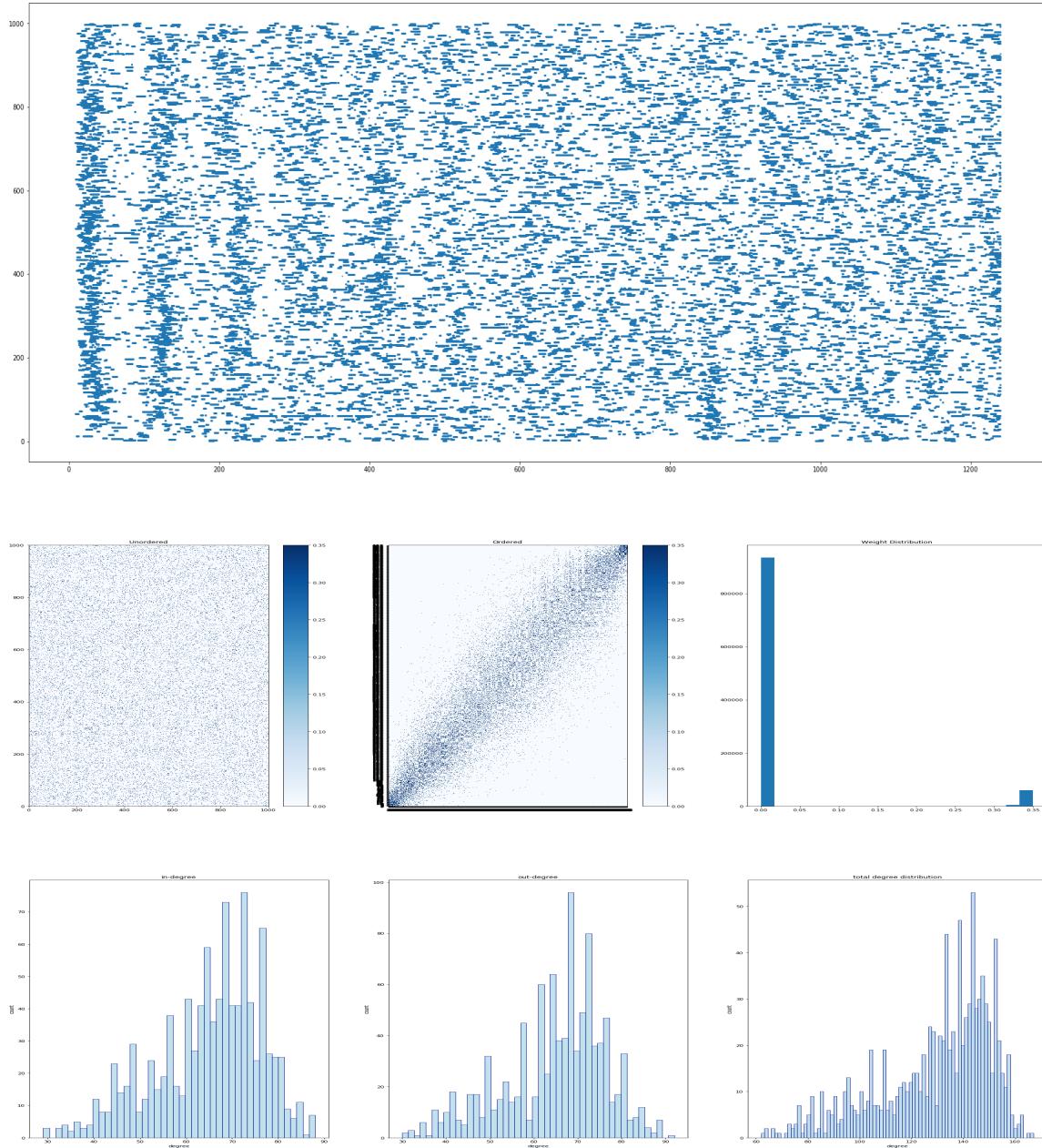
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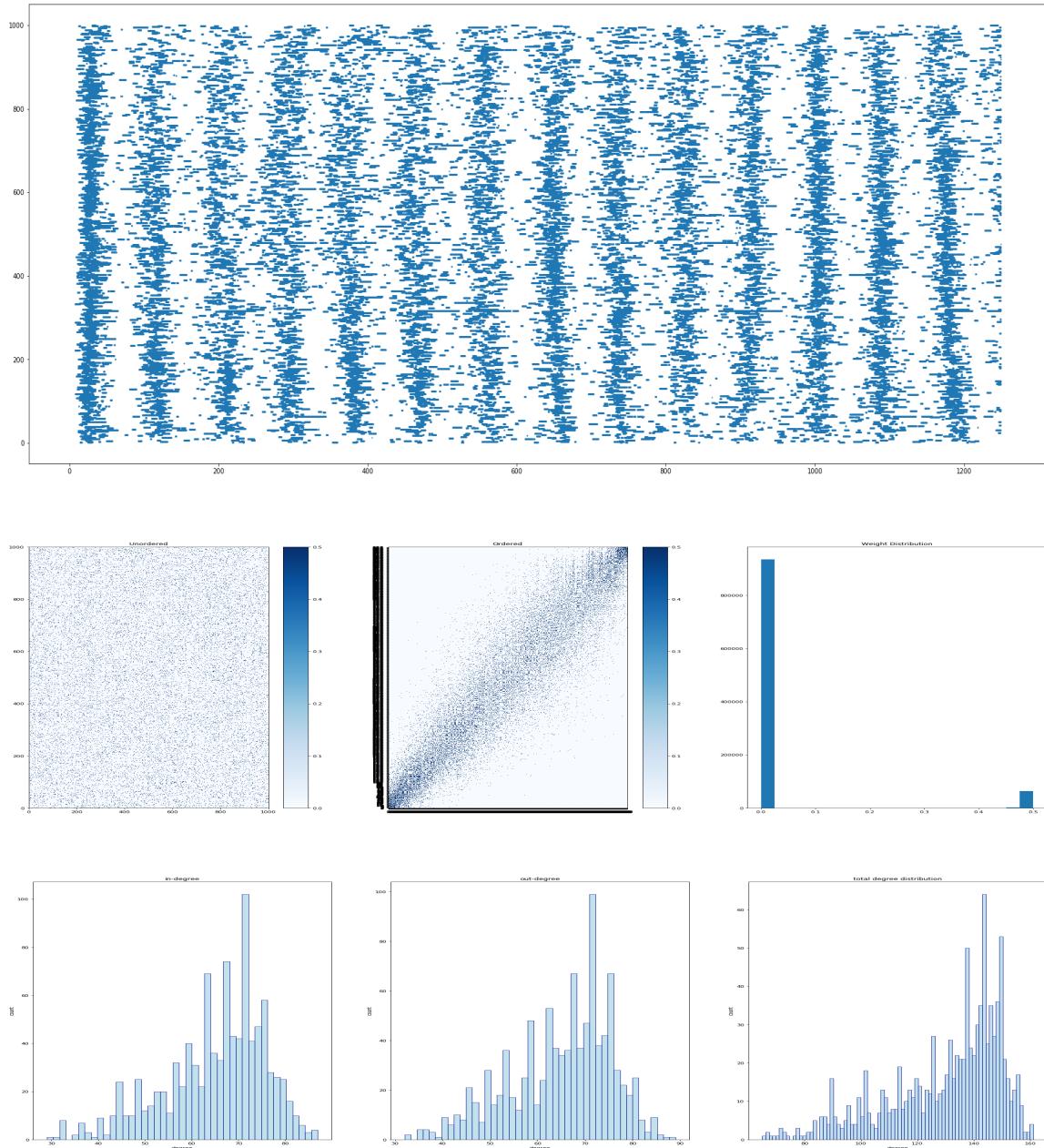
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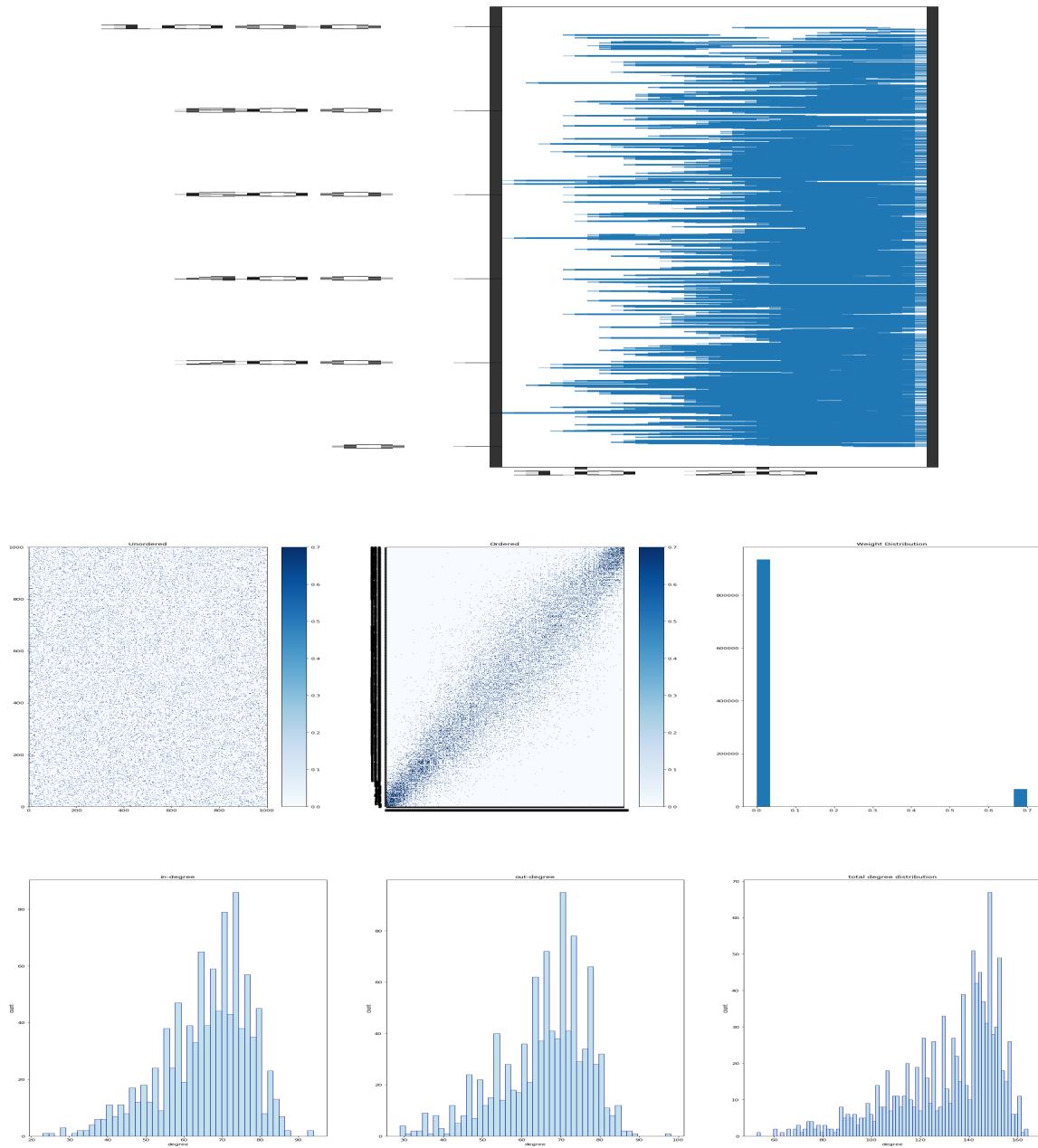
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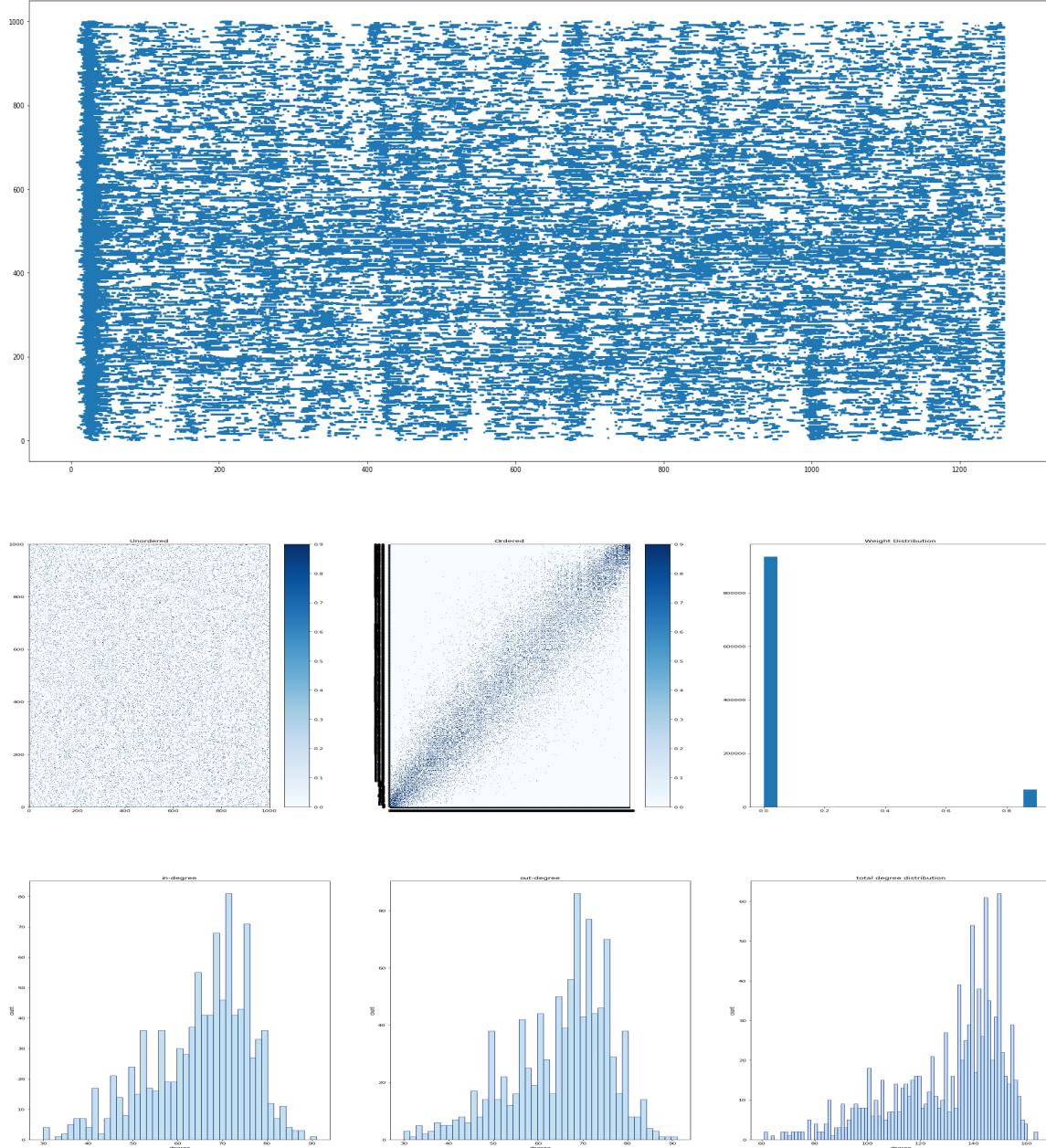
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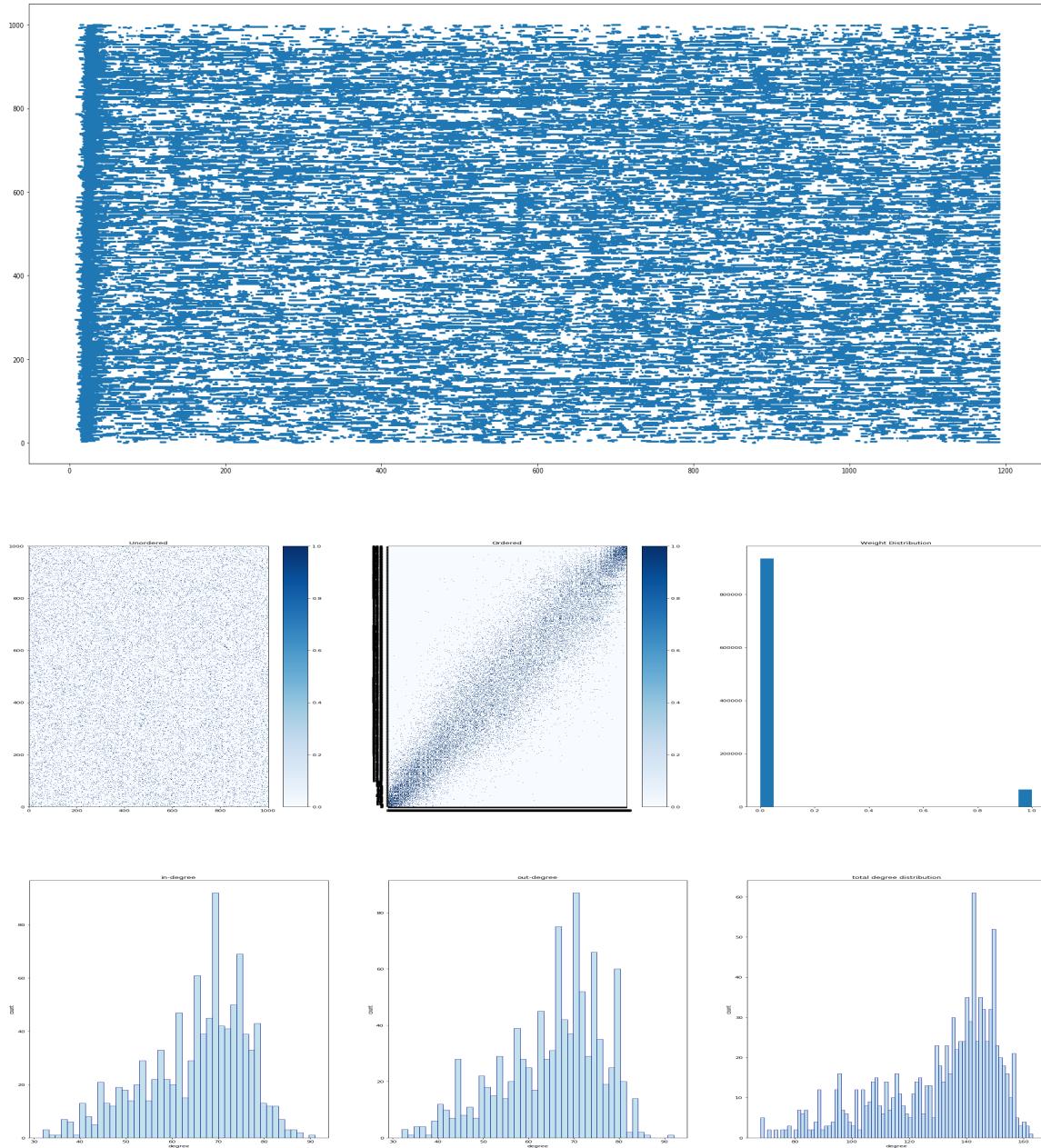
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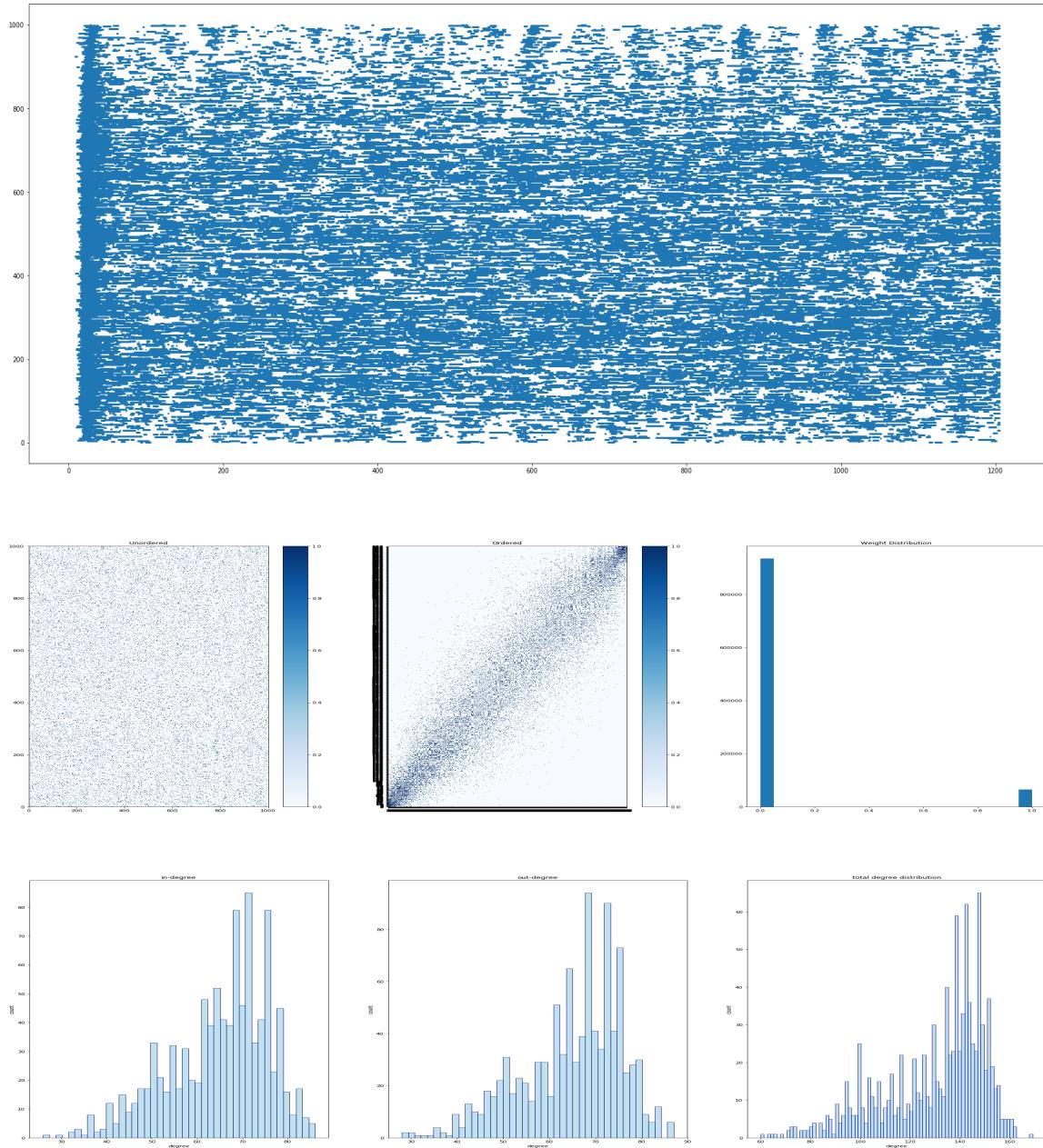
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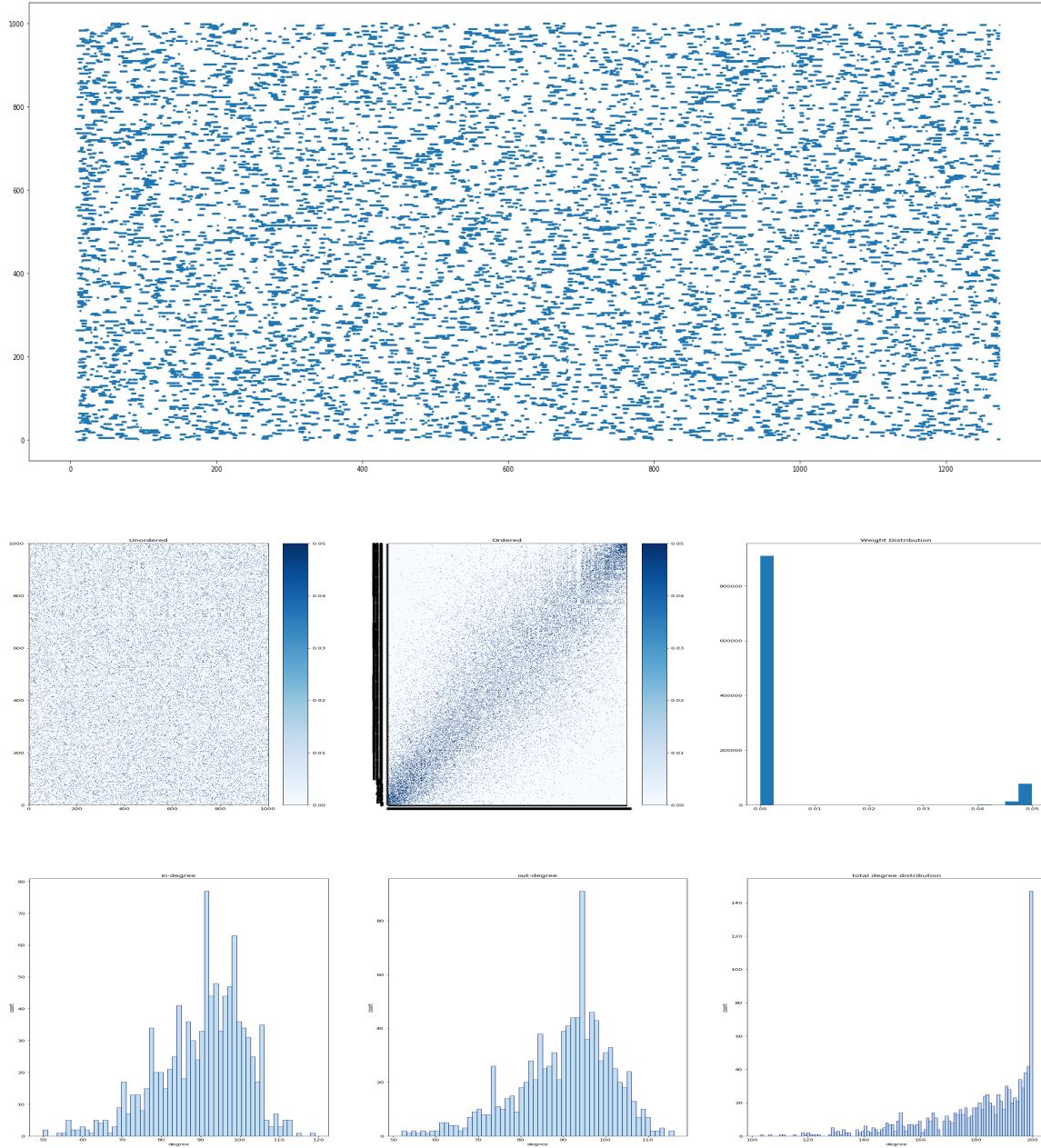
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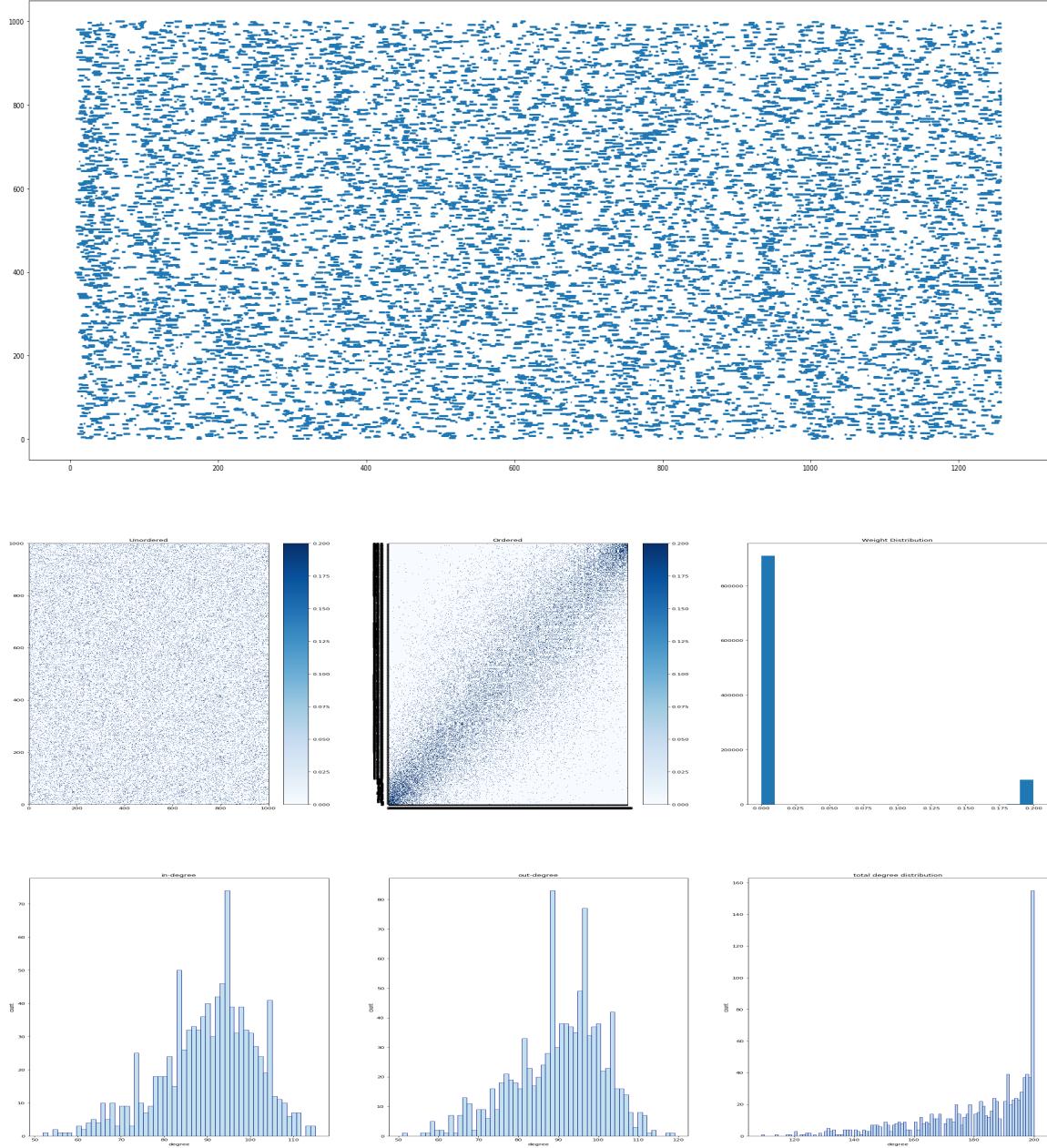
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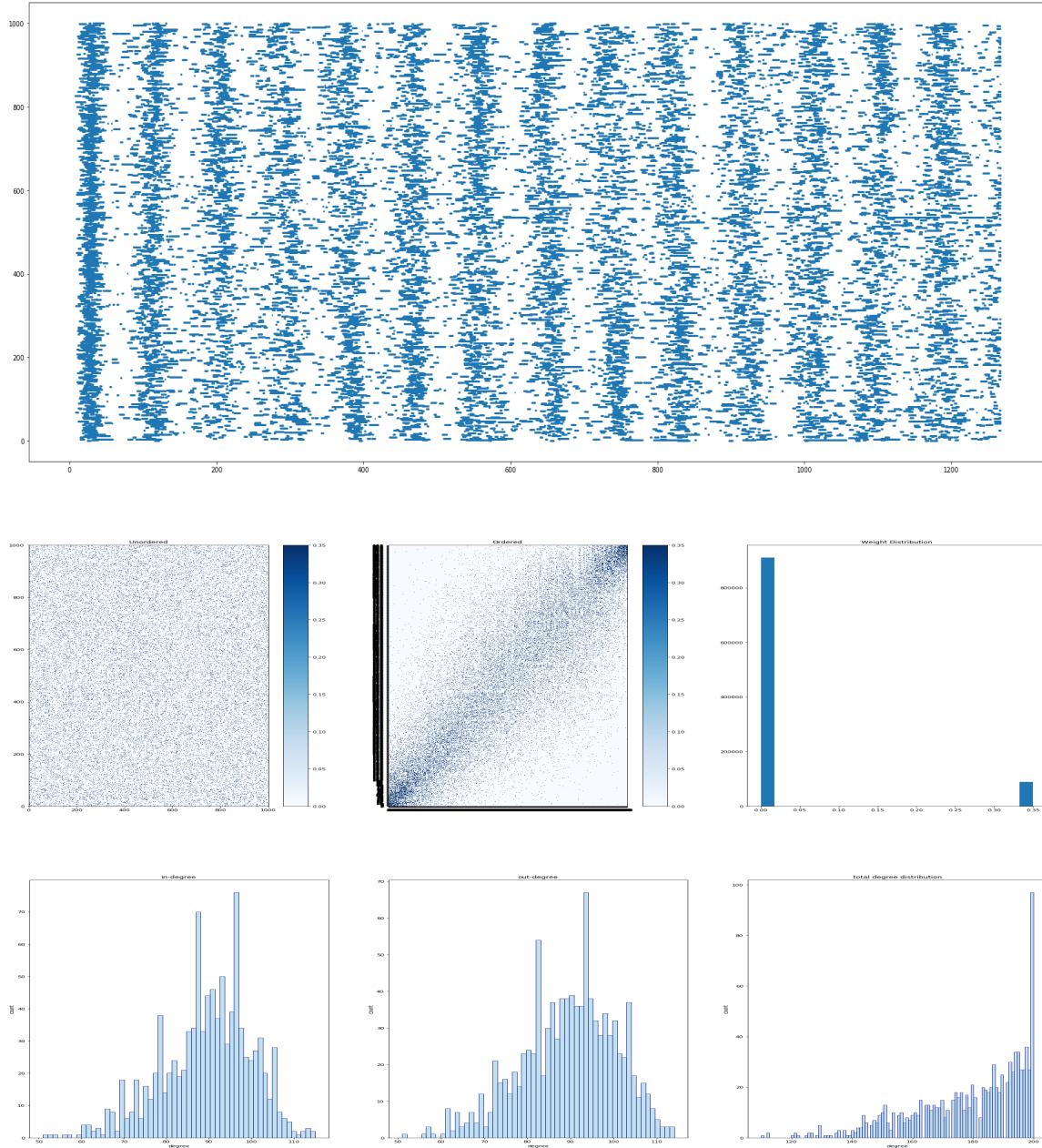
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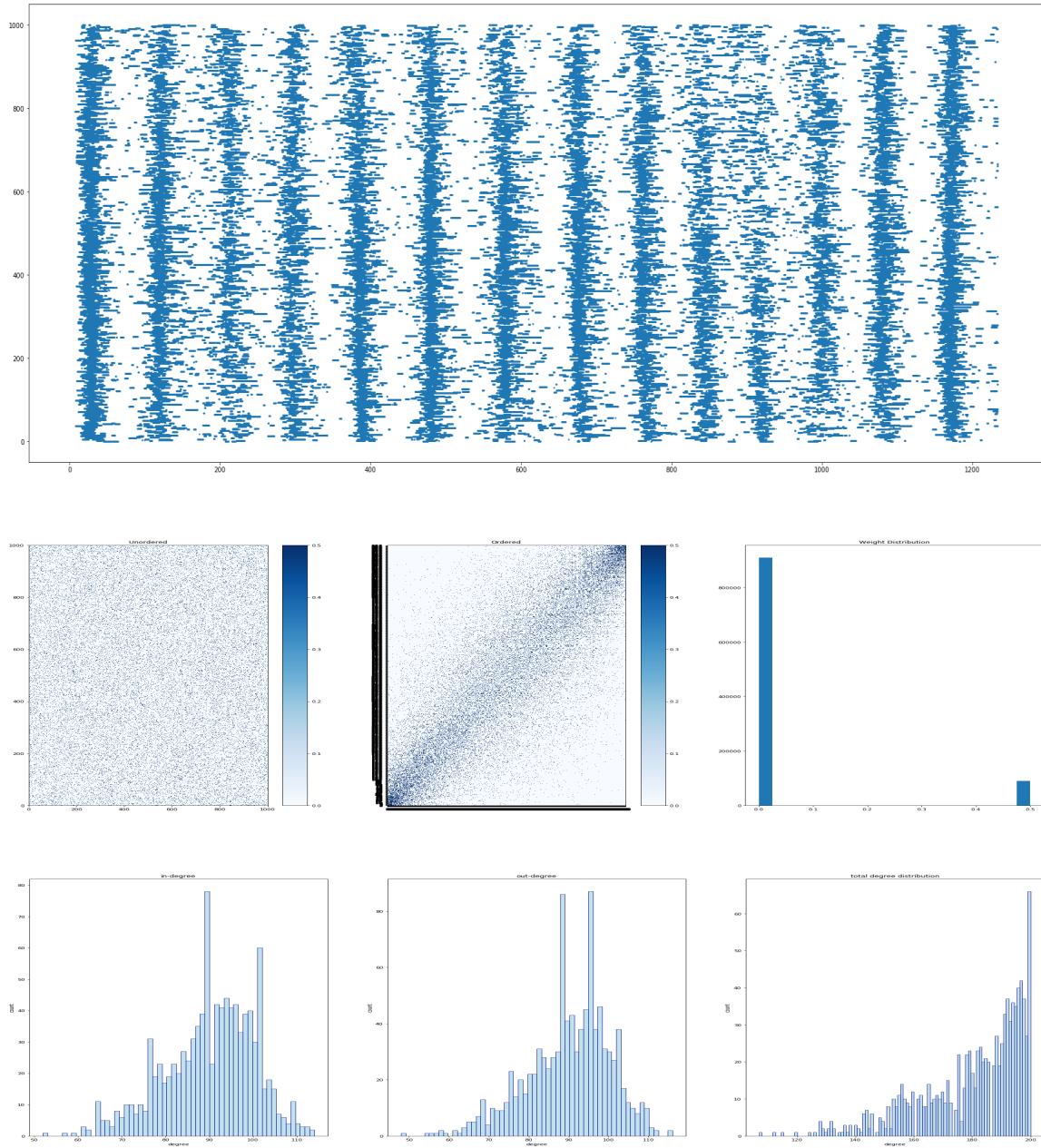
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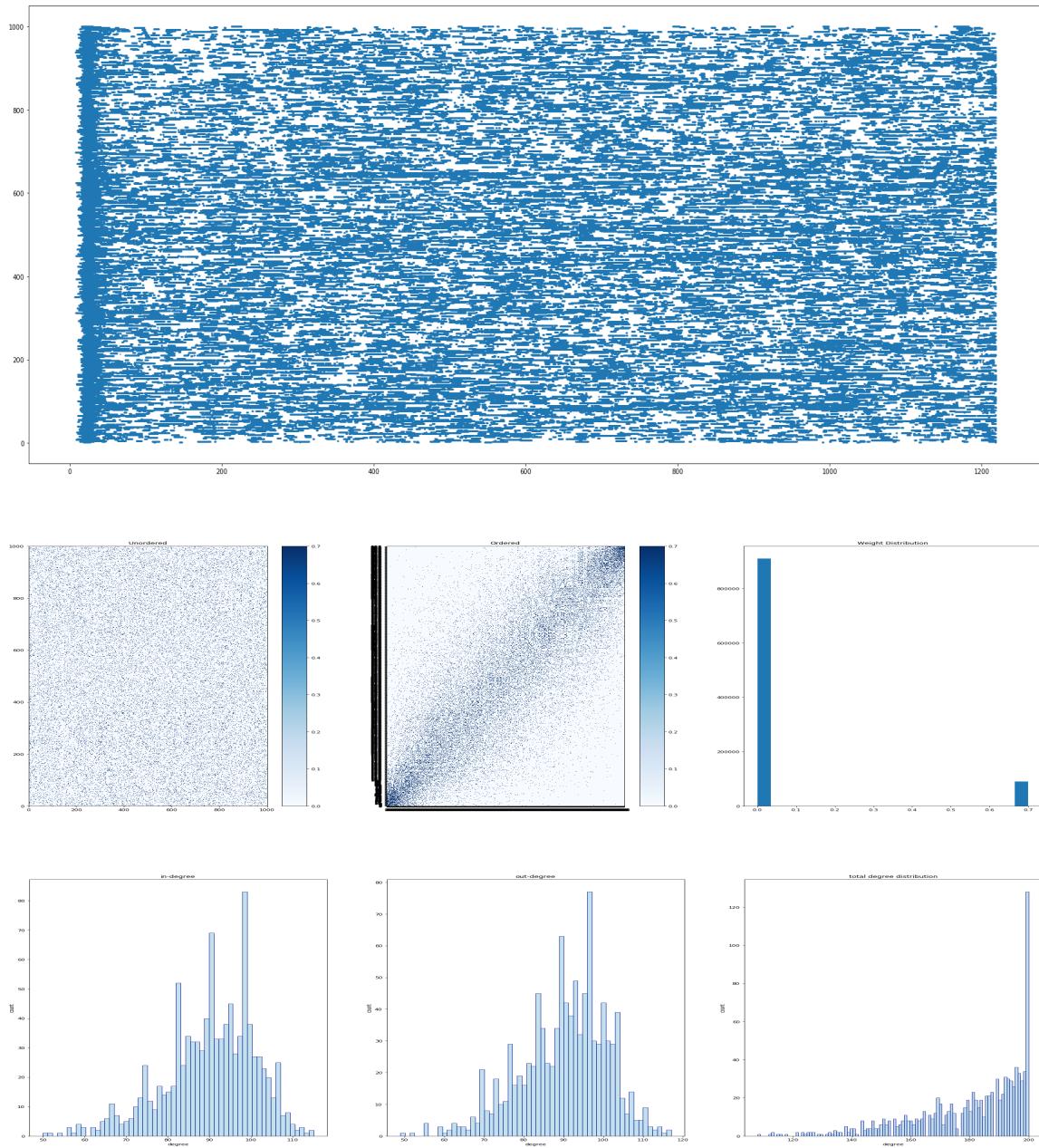
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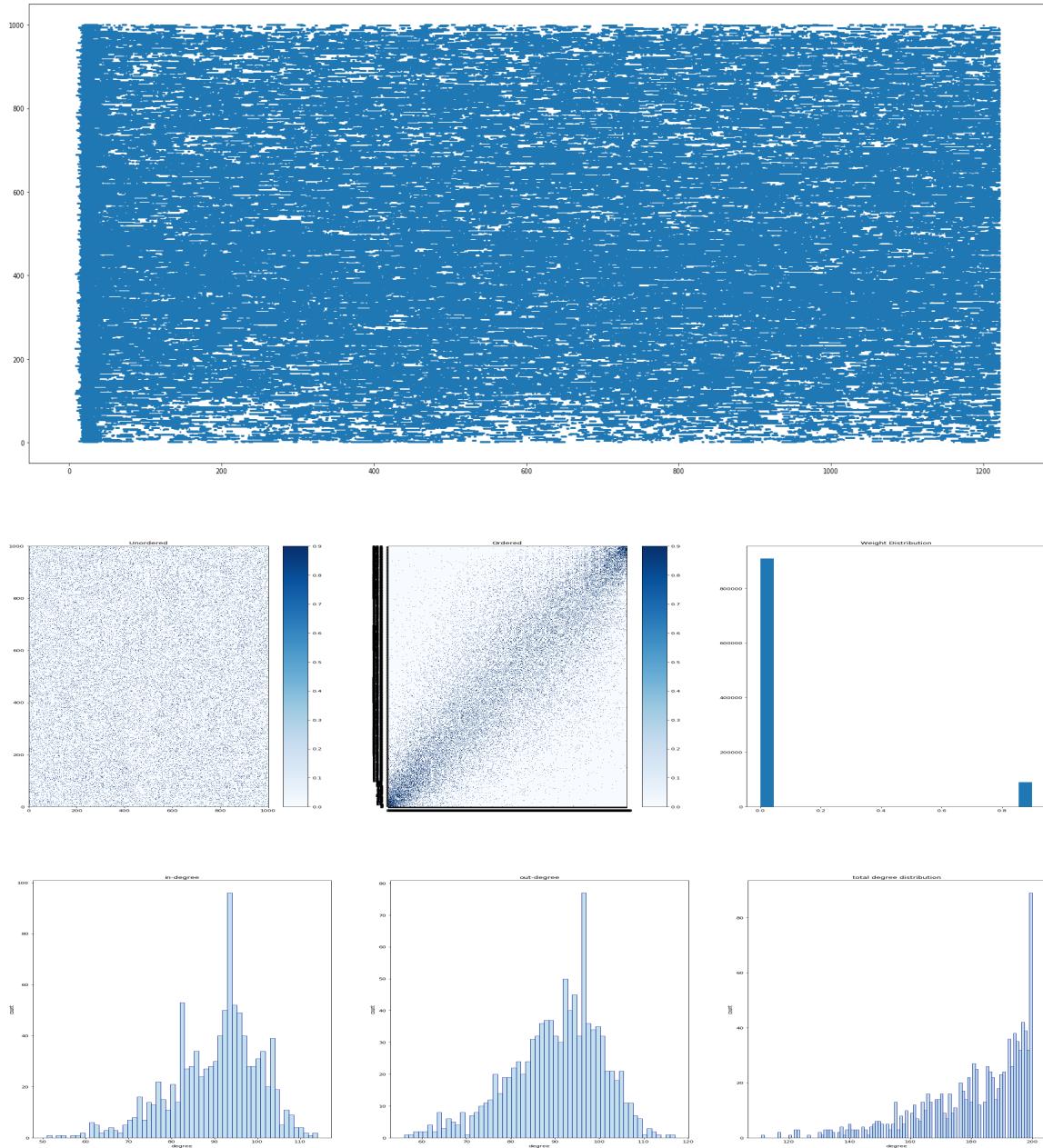
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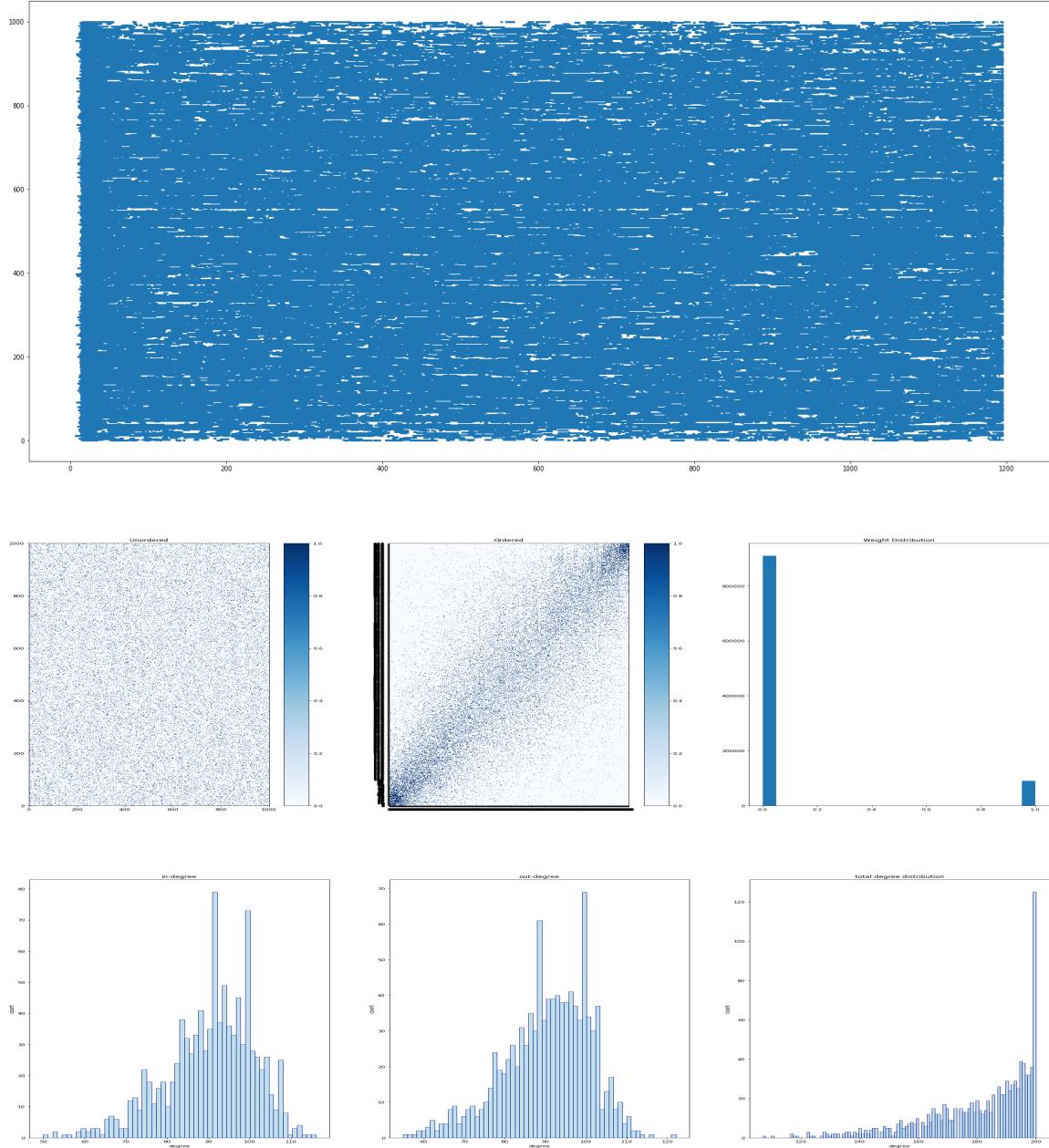
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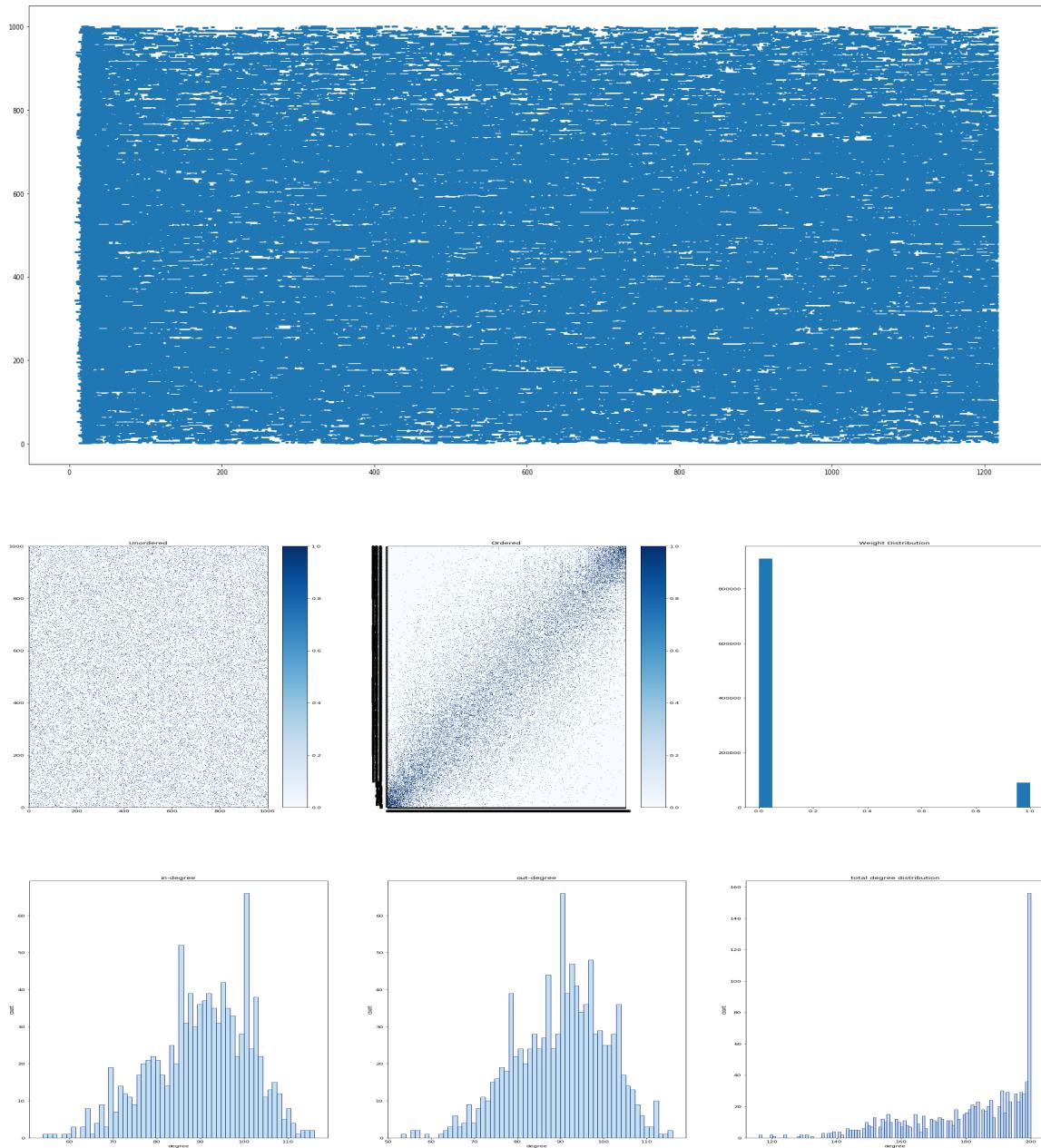
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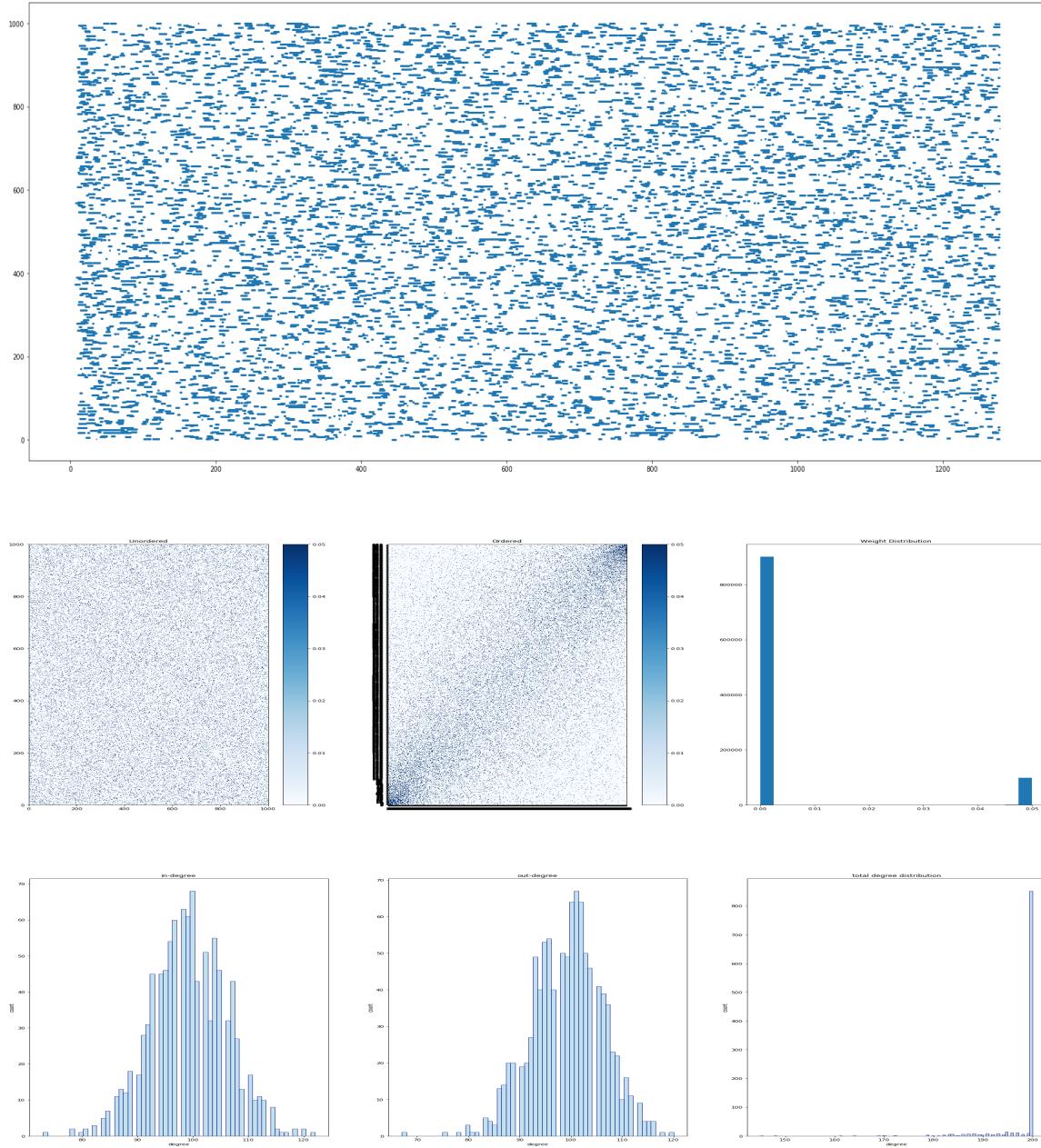
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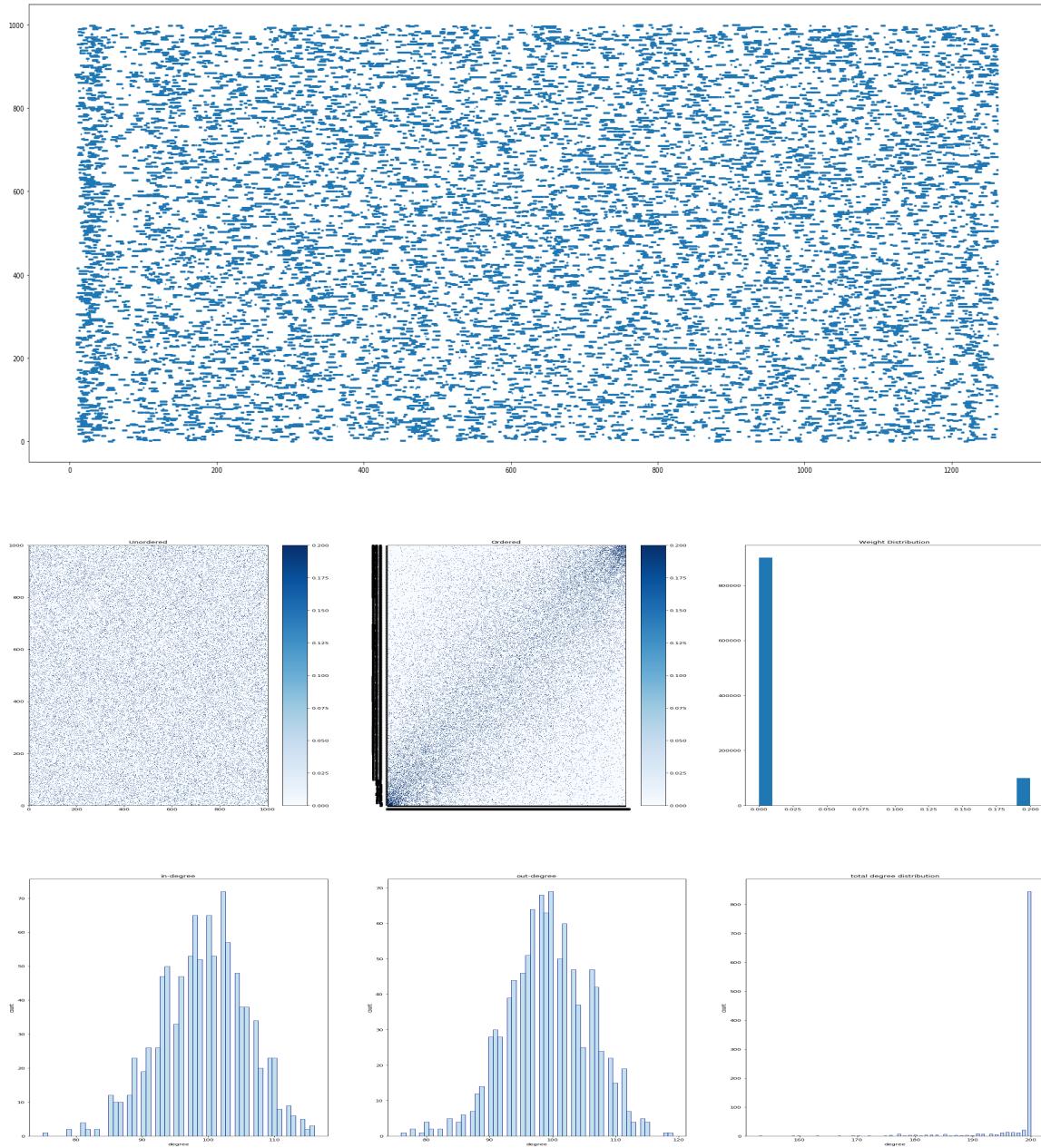
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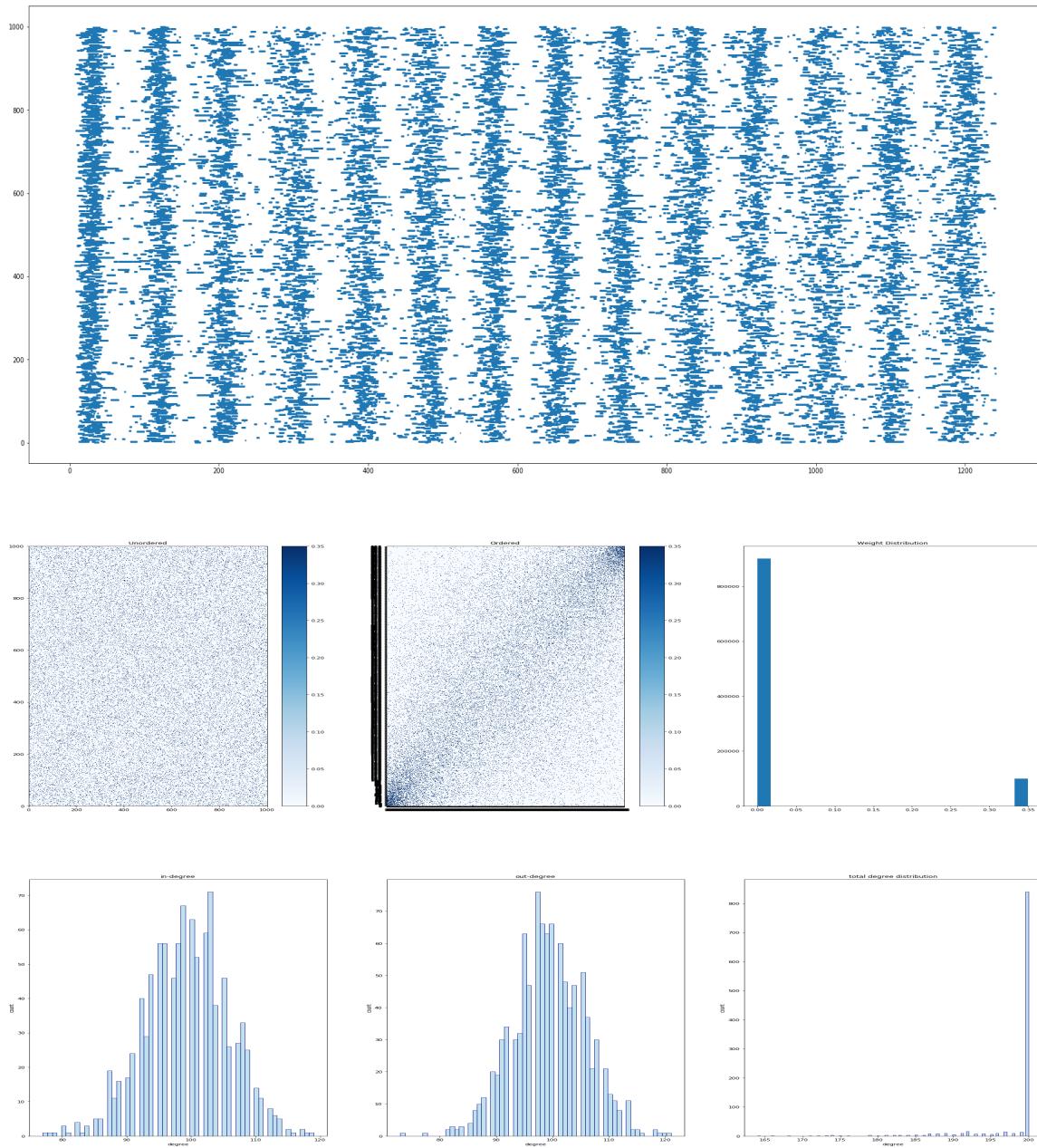
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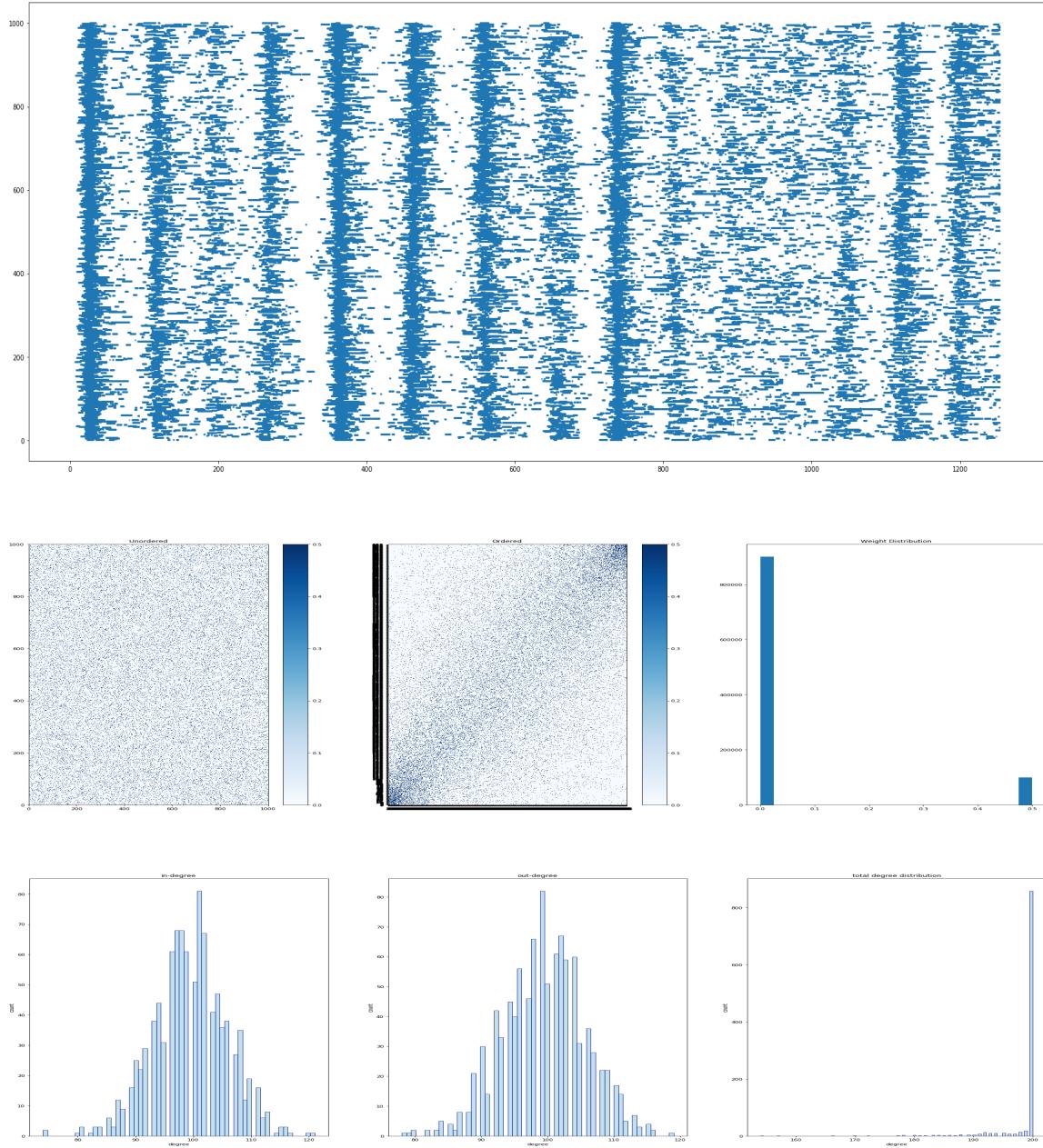
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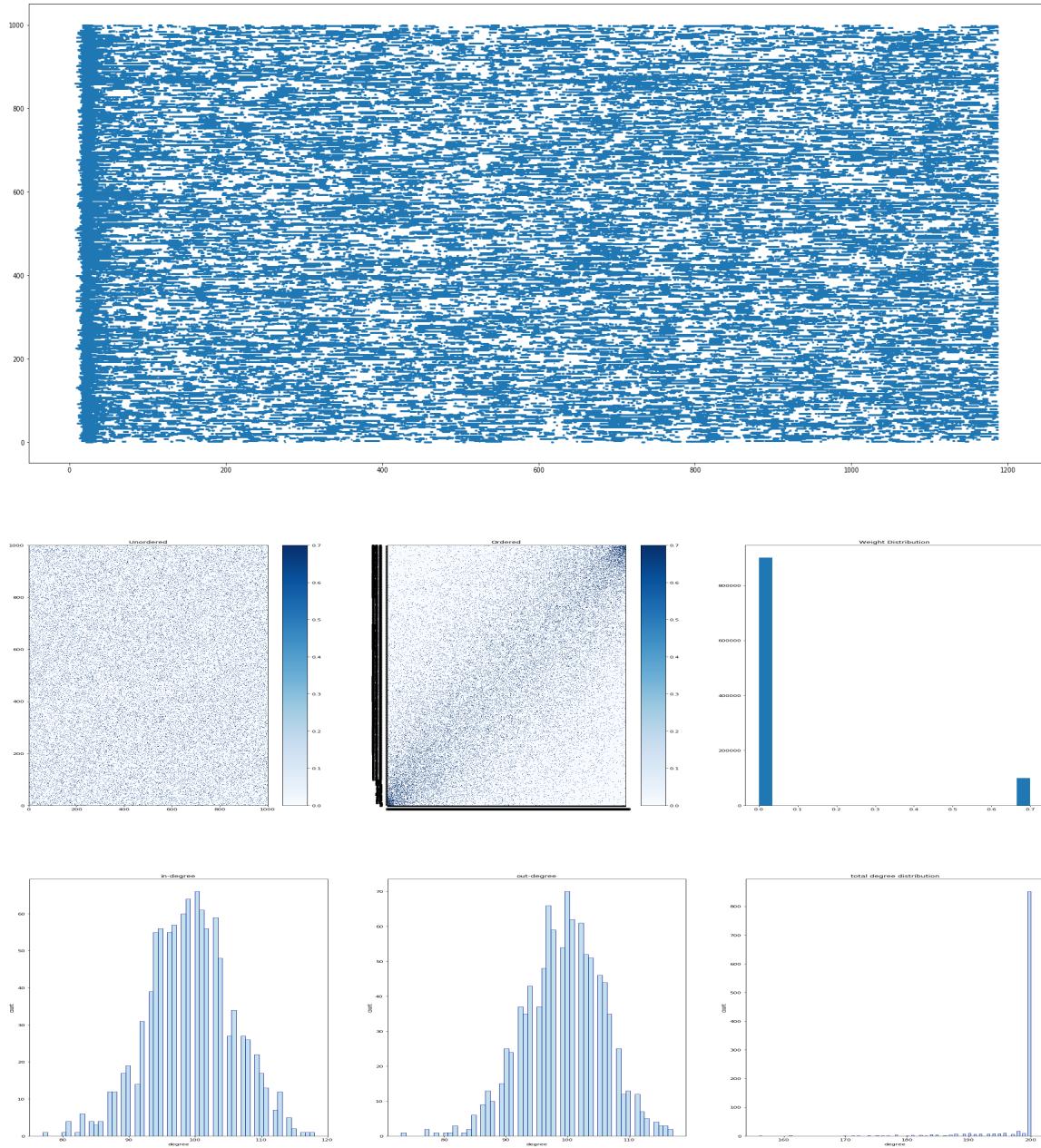
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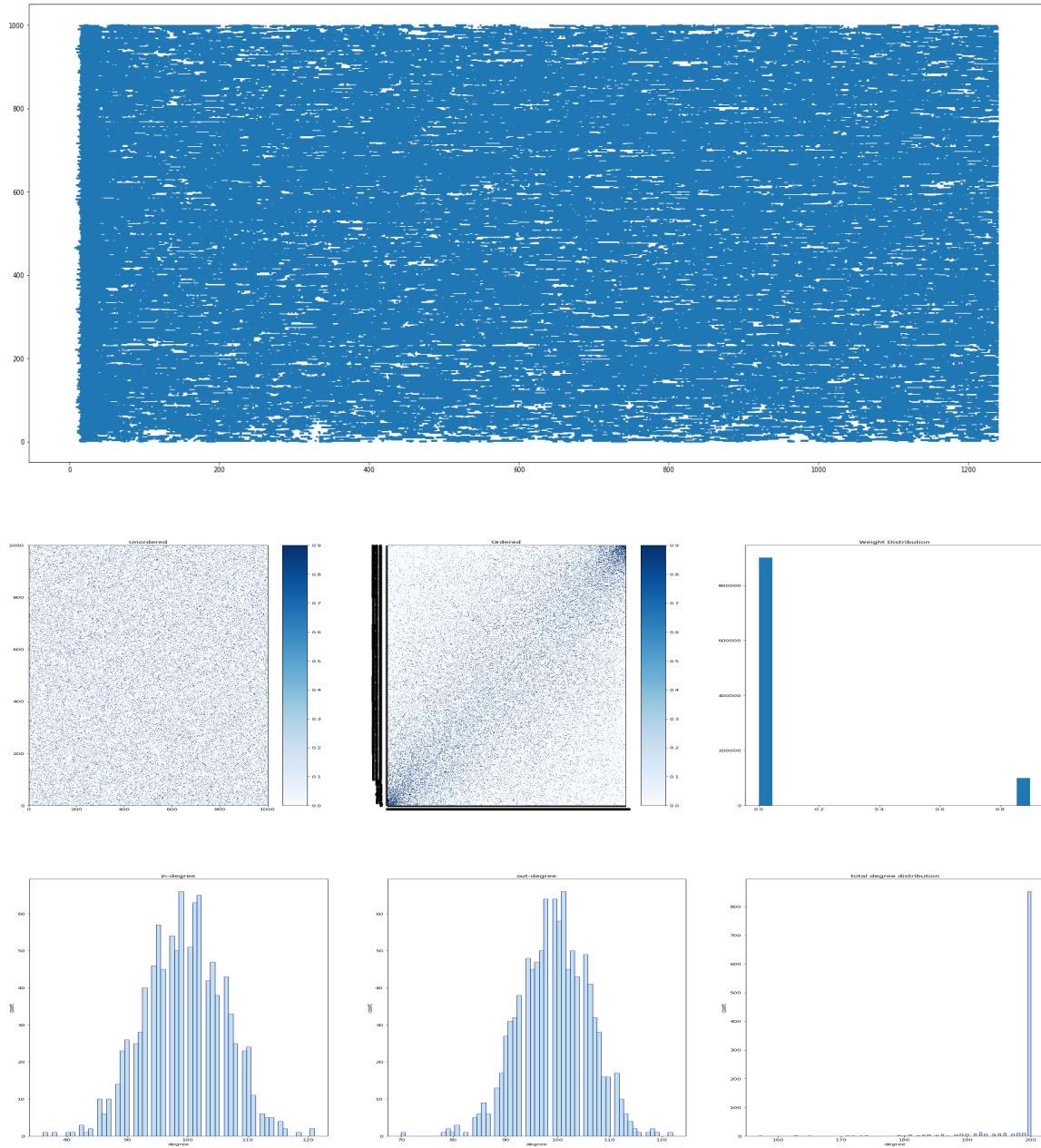
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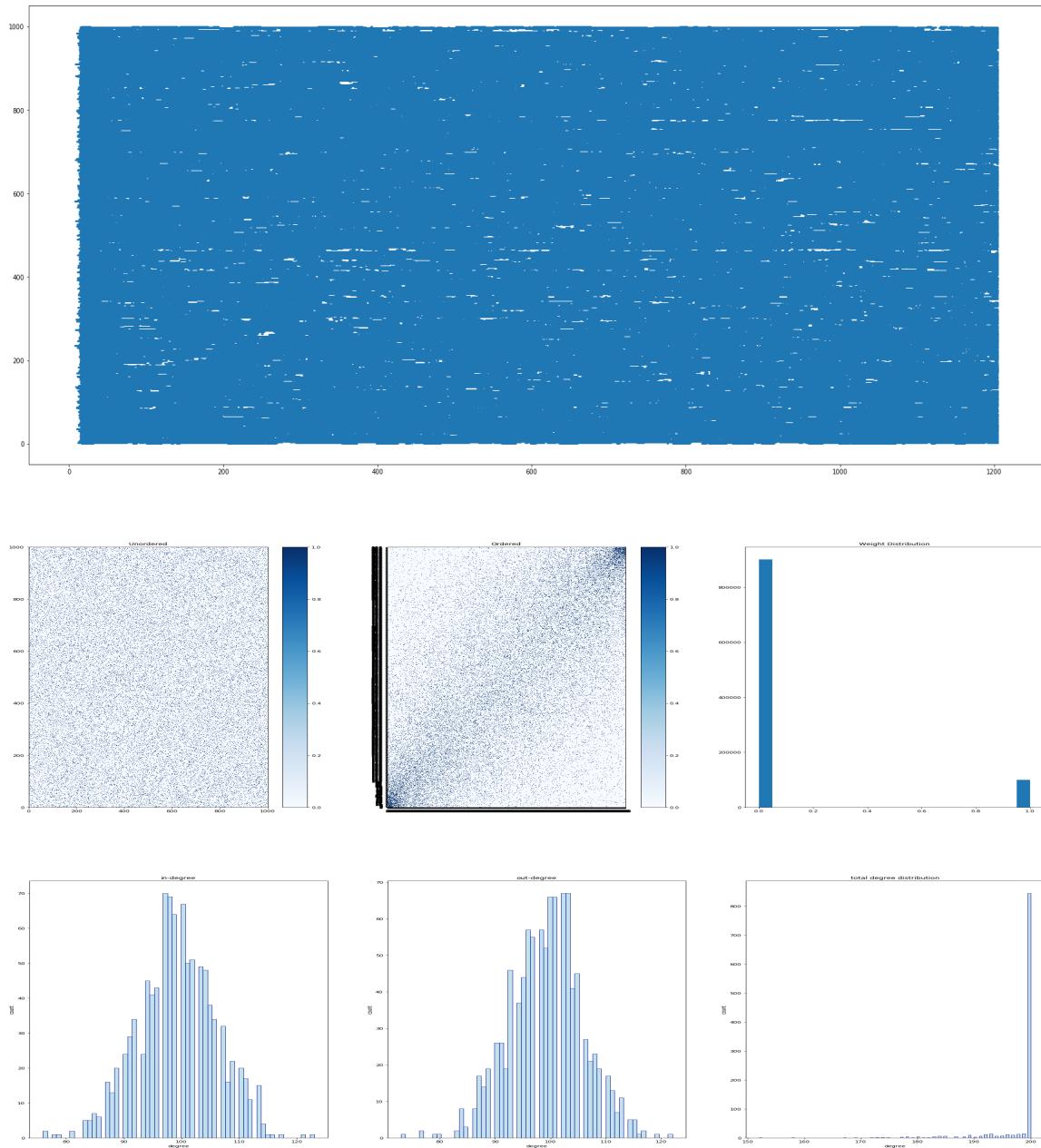
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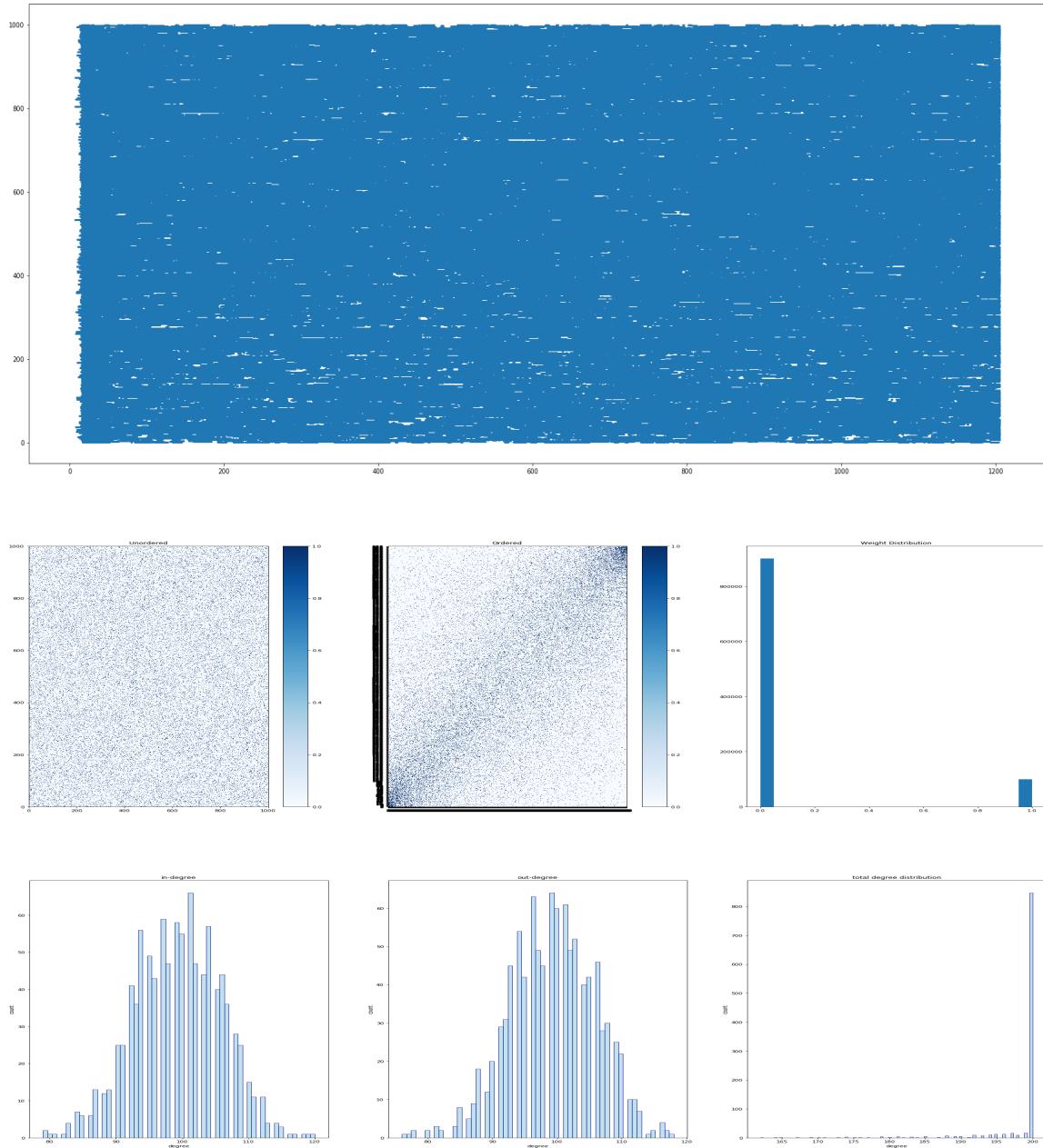
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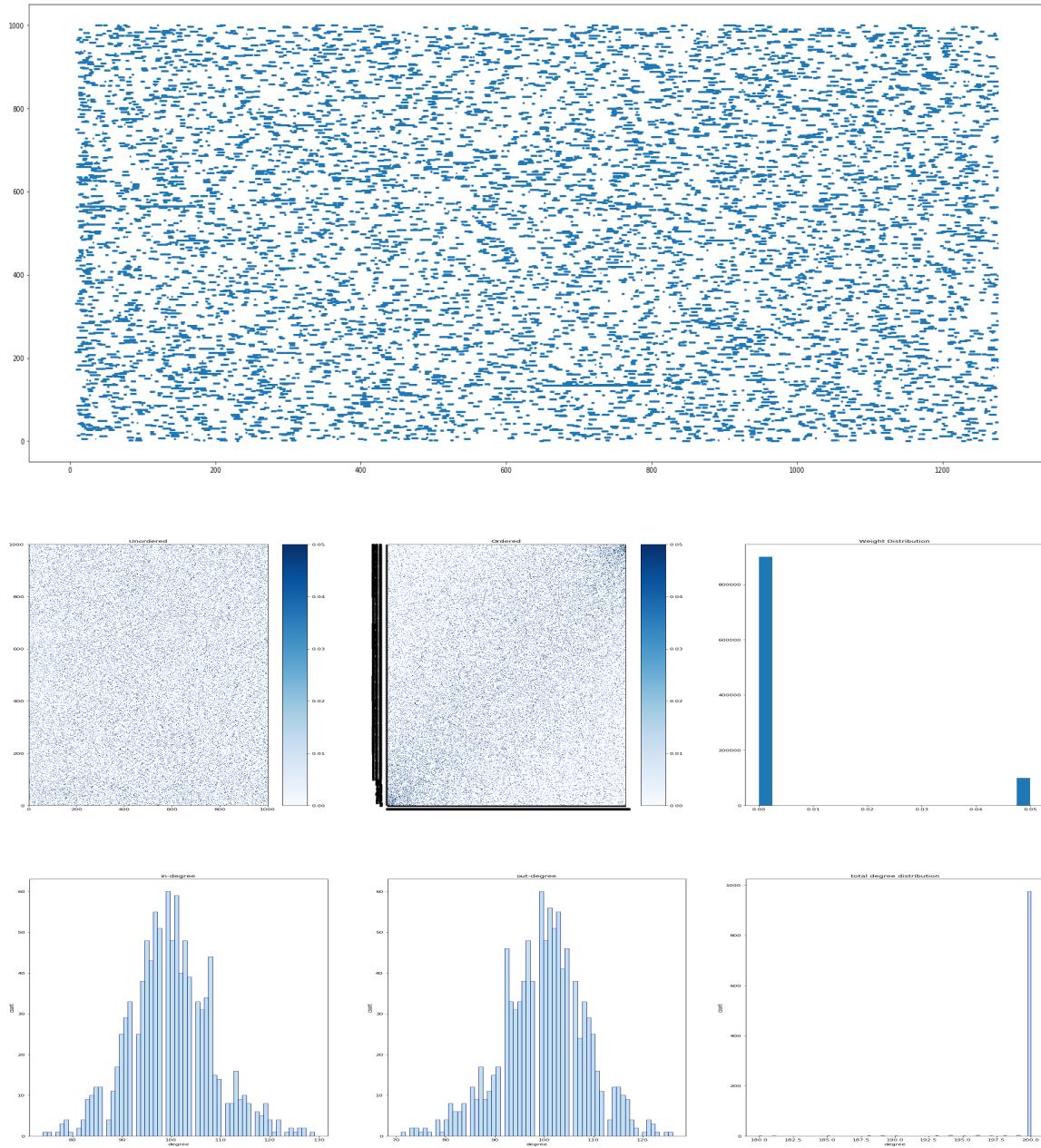
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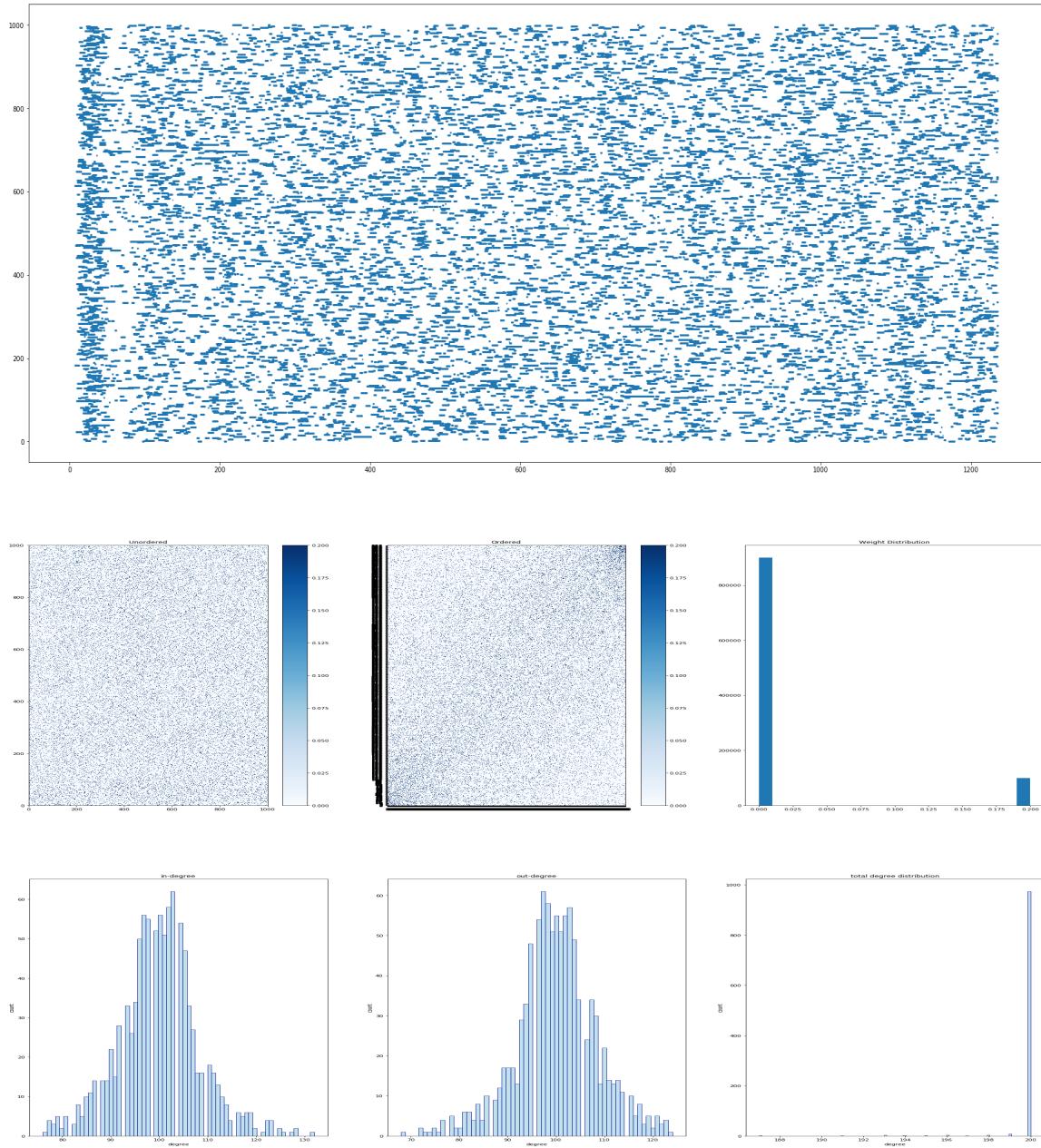
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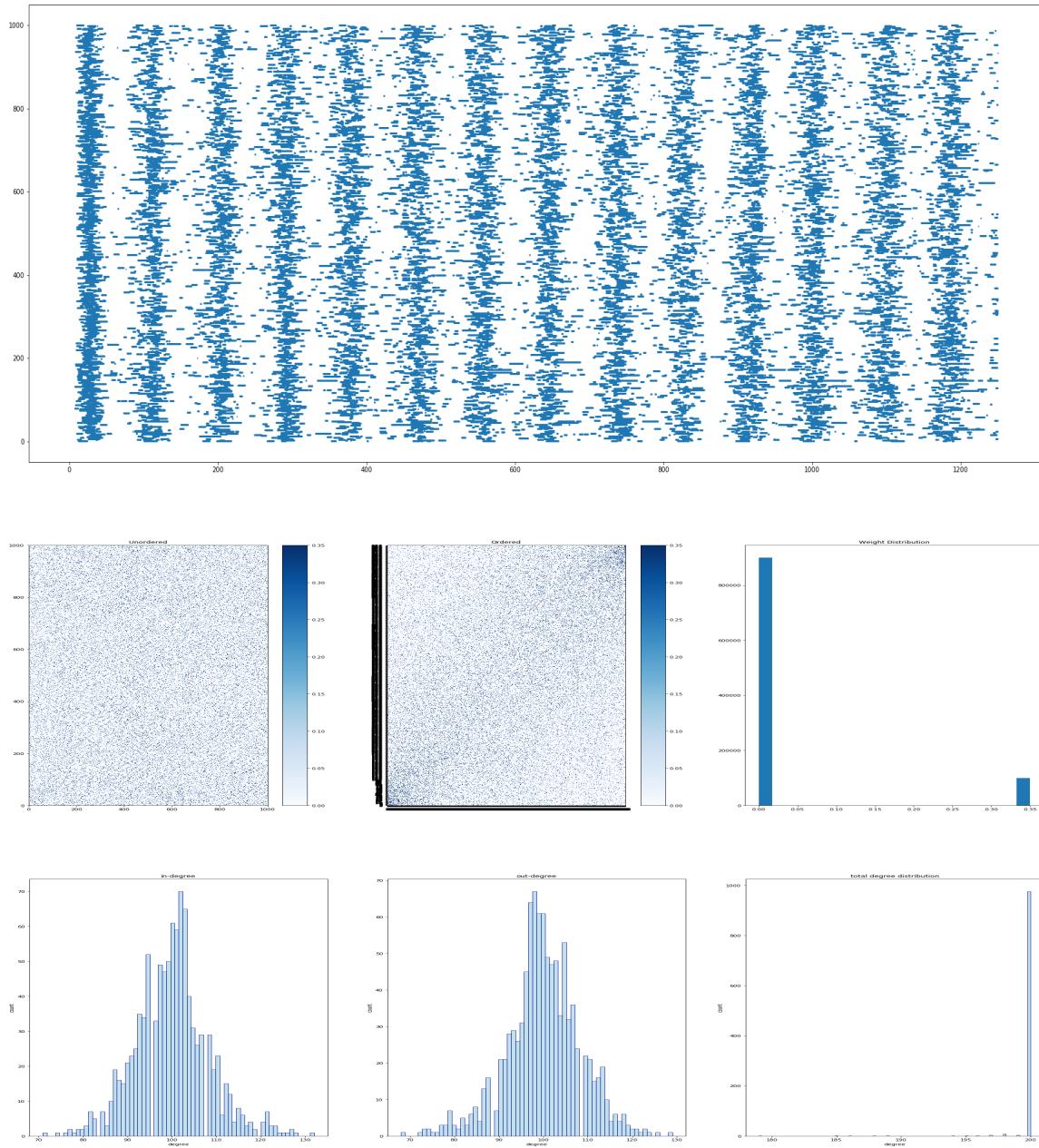
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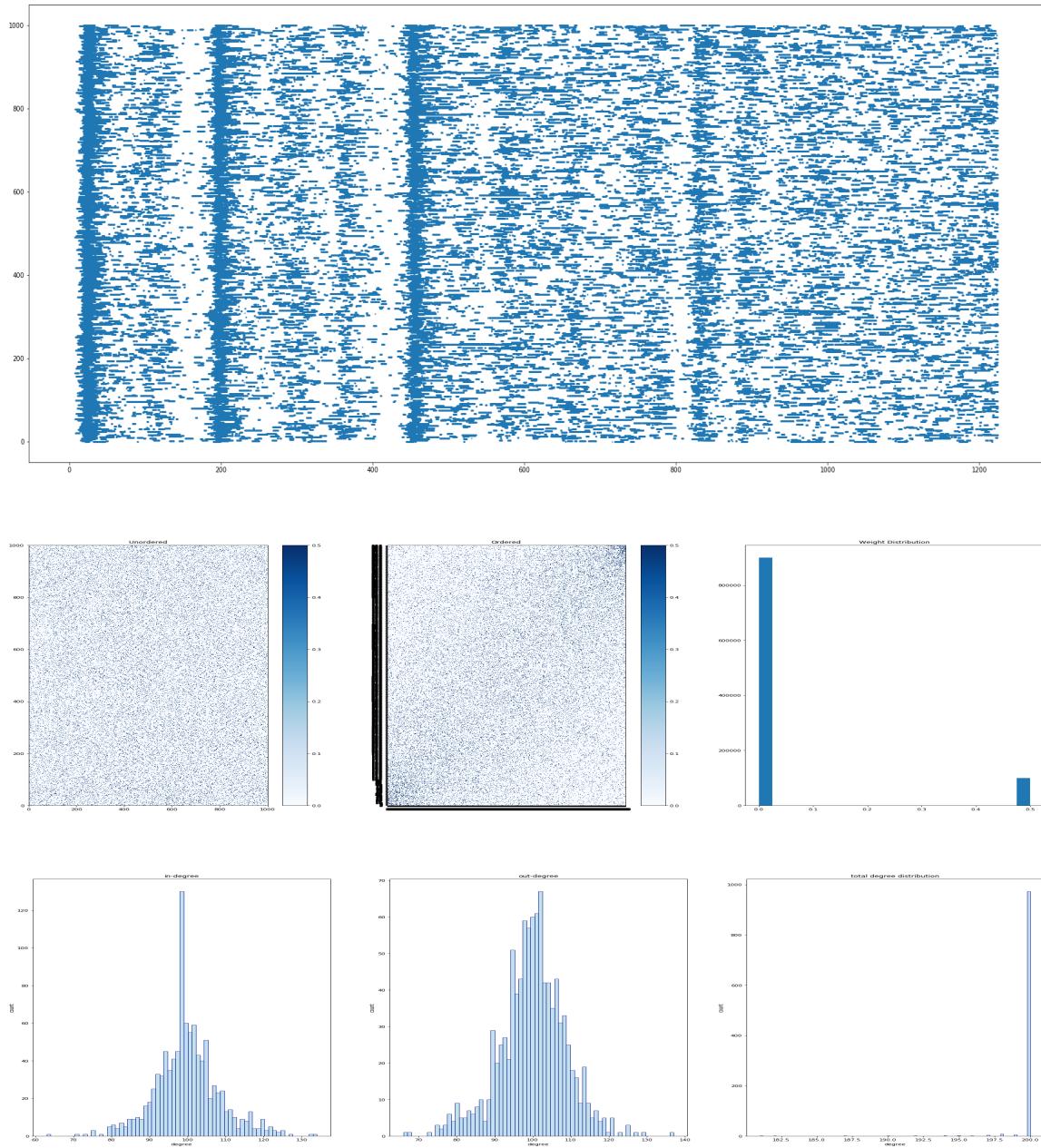
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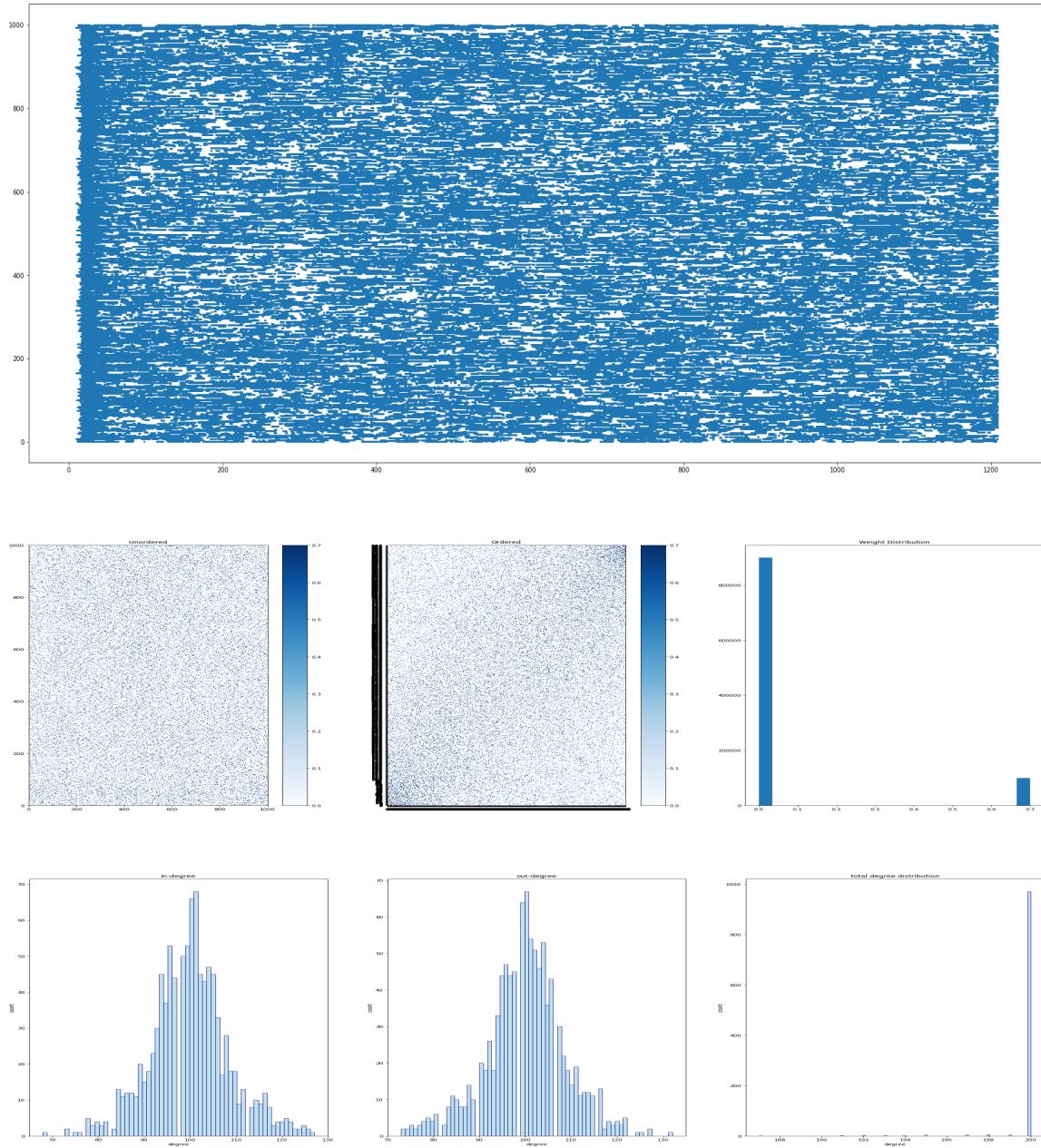
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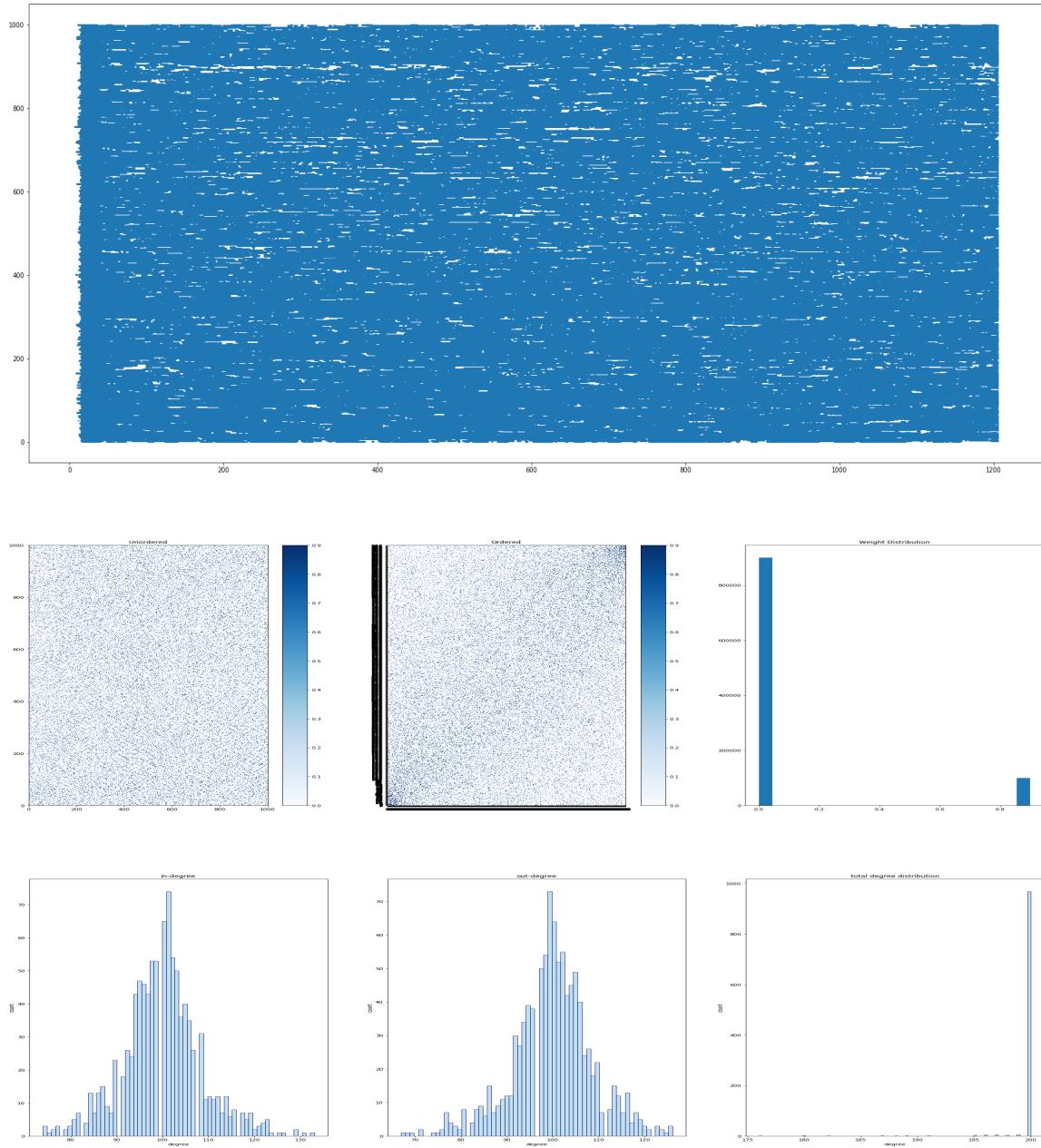
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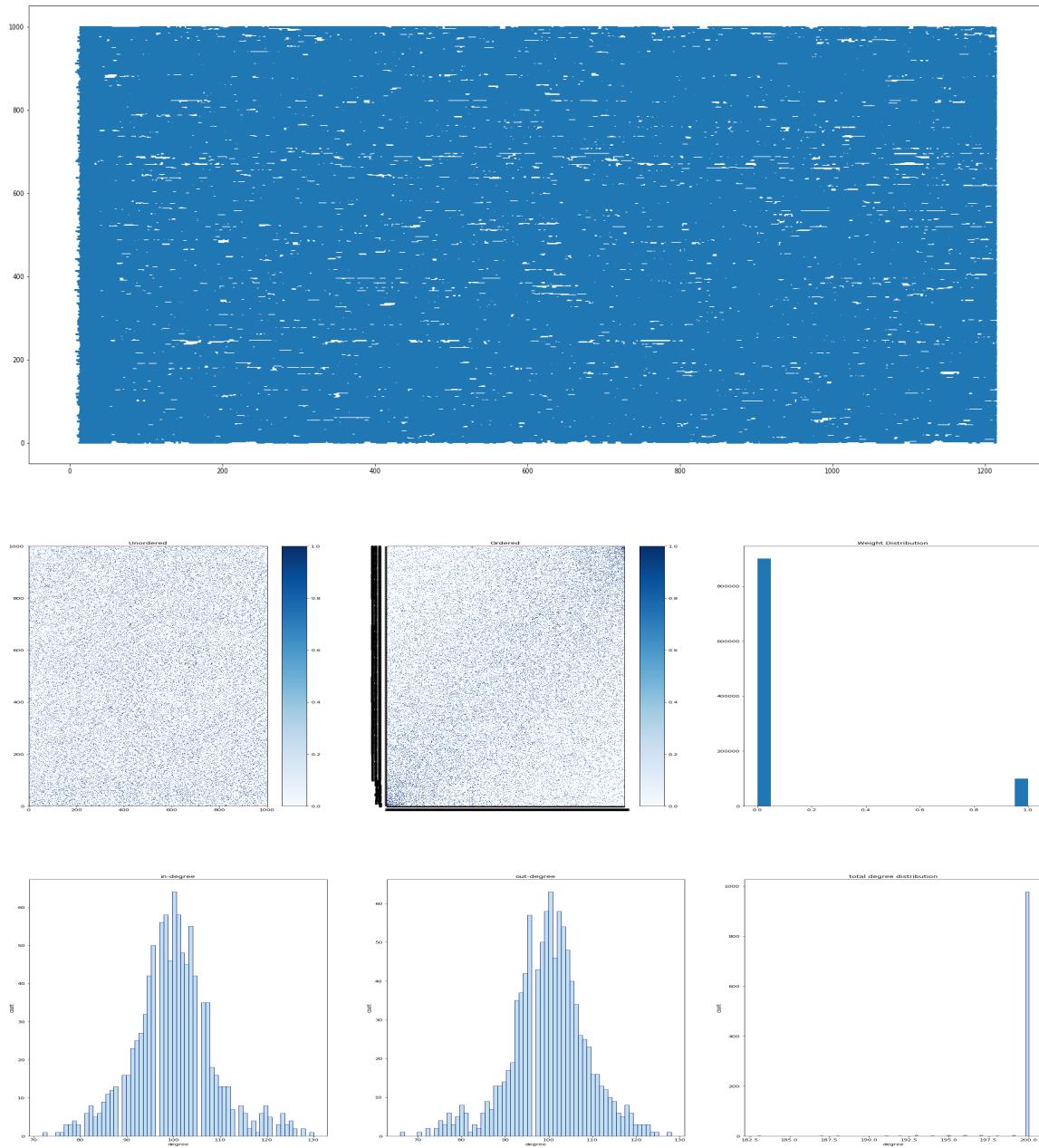
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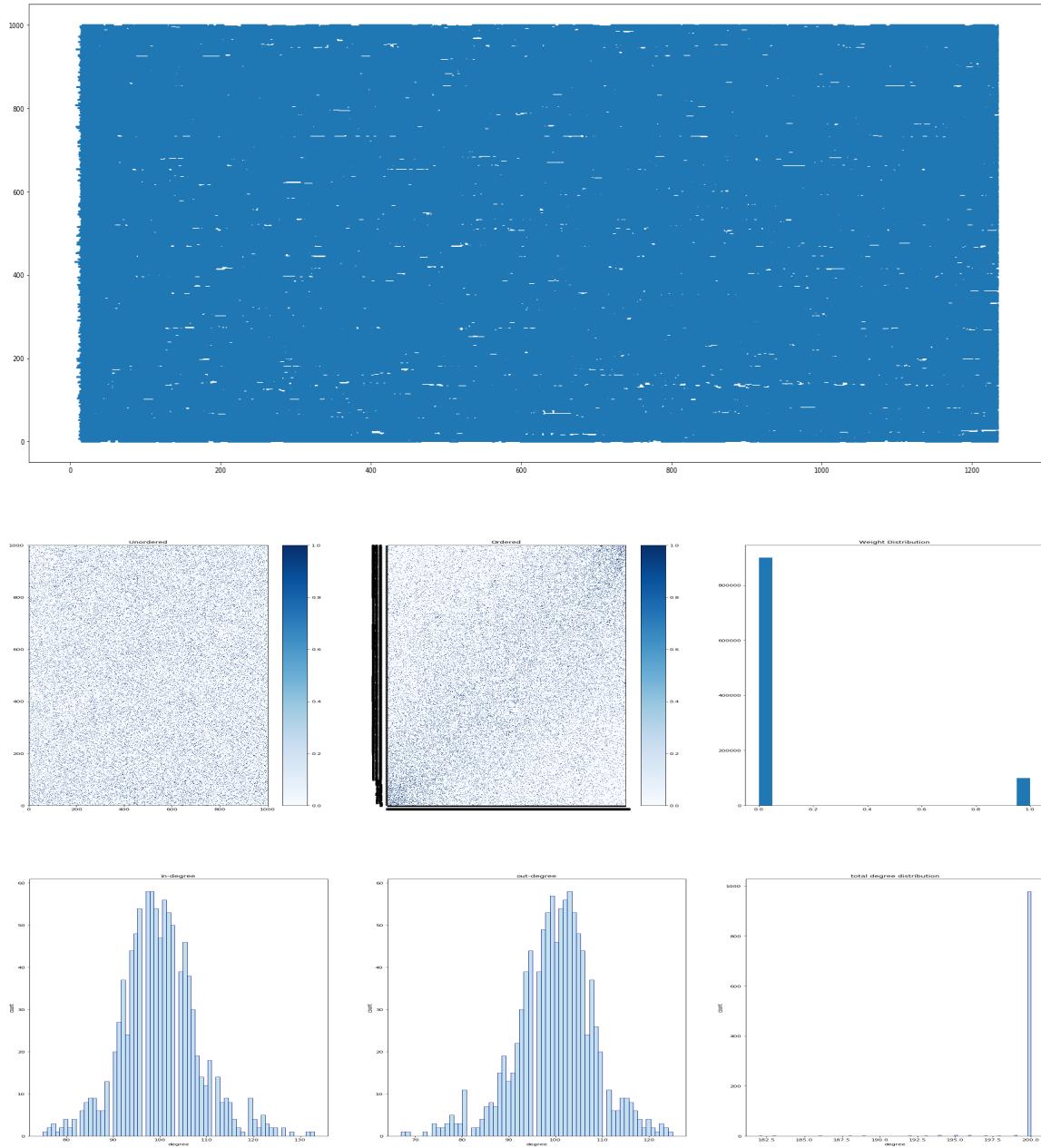
### 3.30 Spatial Scale=40, Development Time=180



### 3.31 Spatial Scale=40, Development Time=200



### 3.32 Spatial Scale=40, Development Time=220



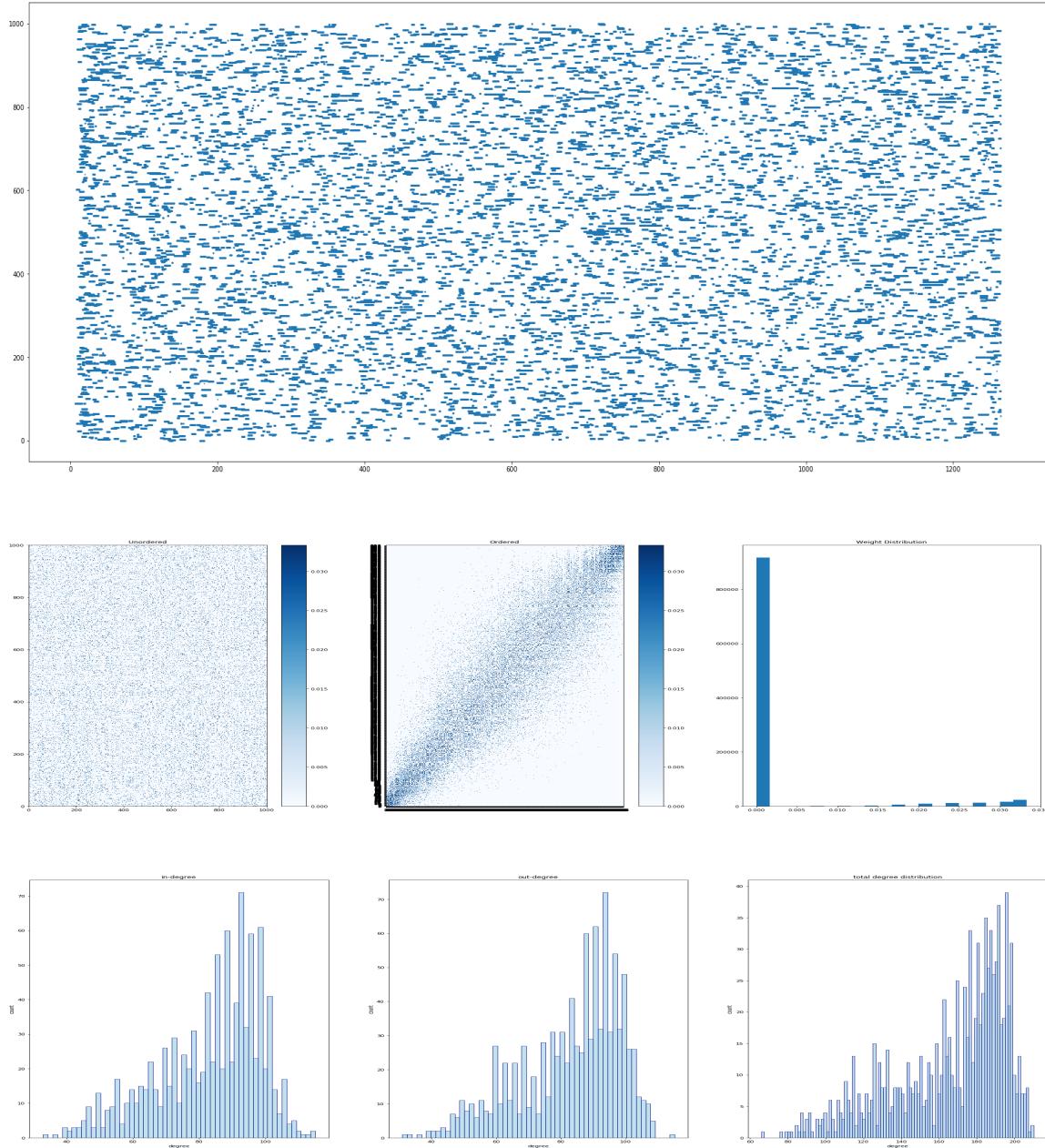
## 4 Synapse Limit: 300

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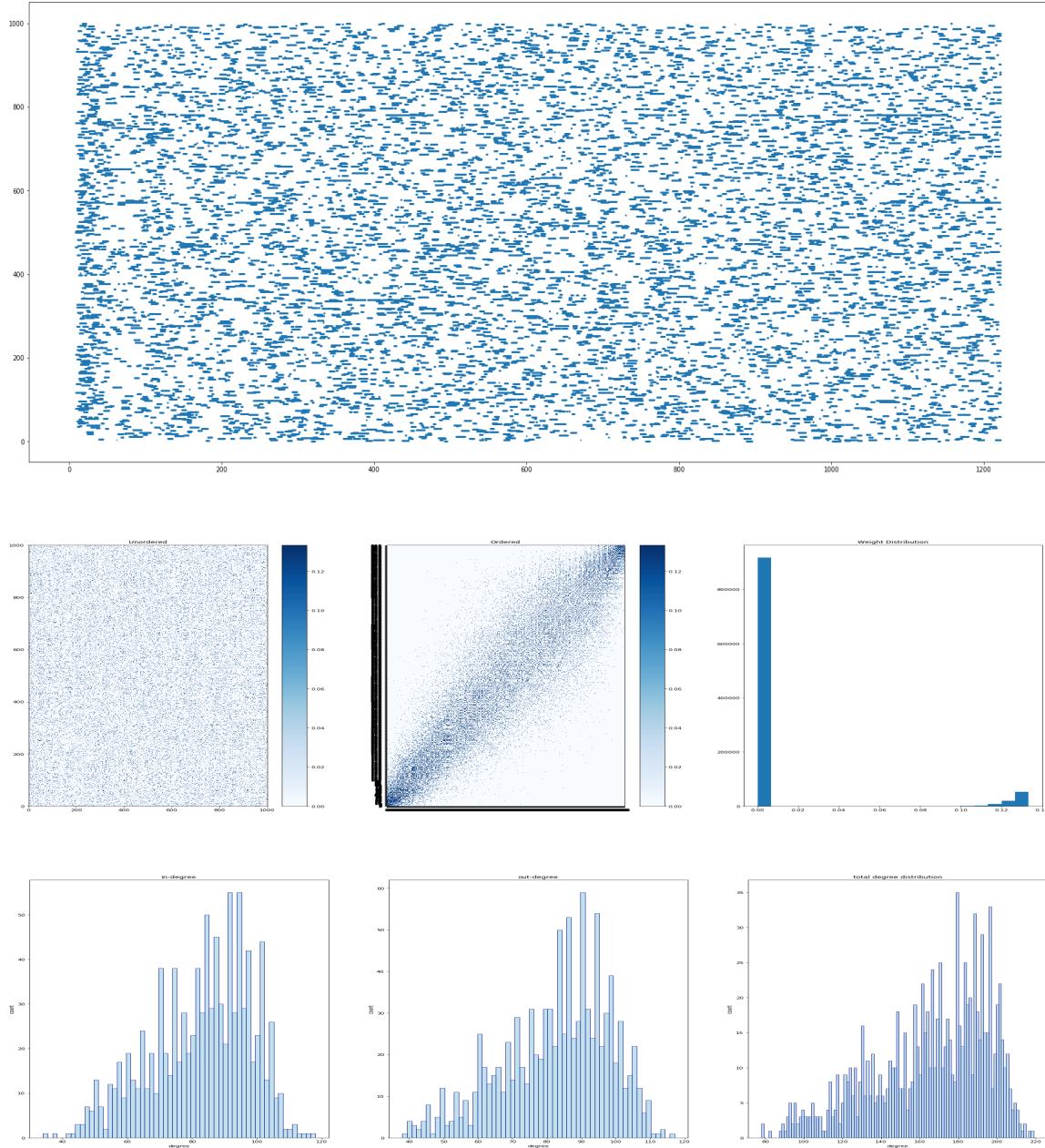
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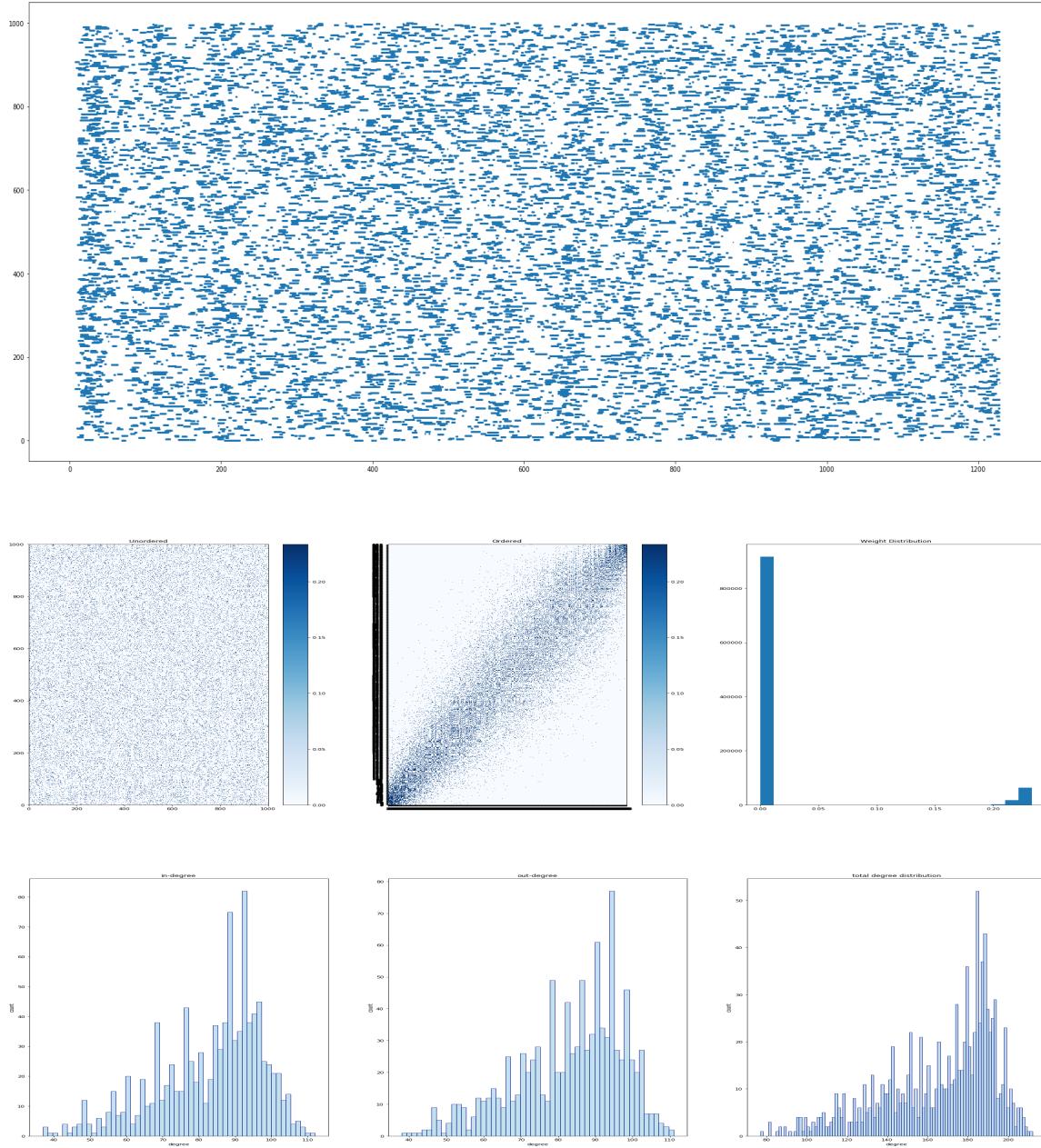
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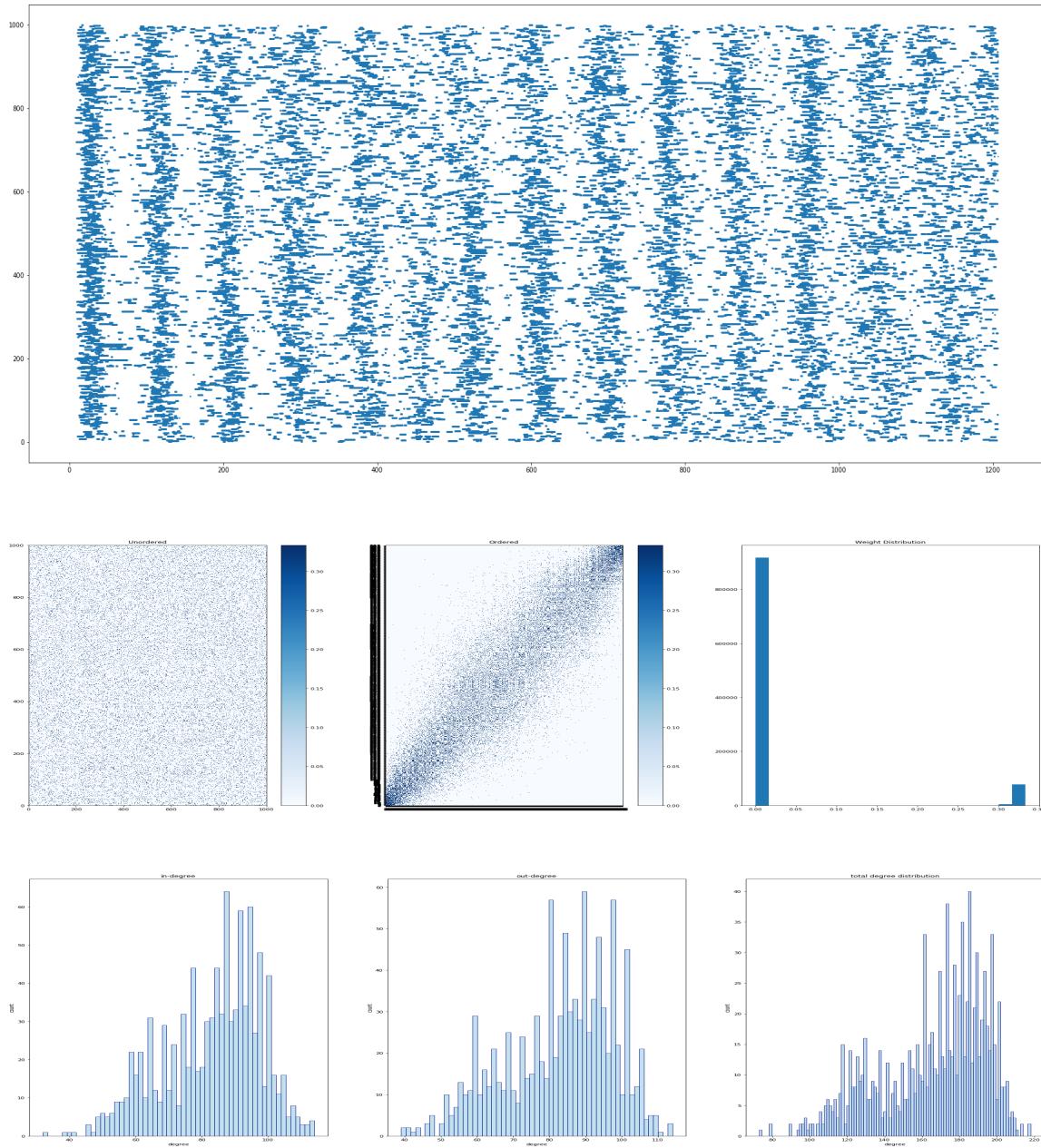
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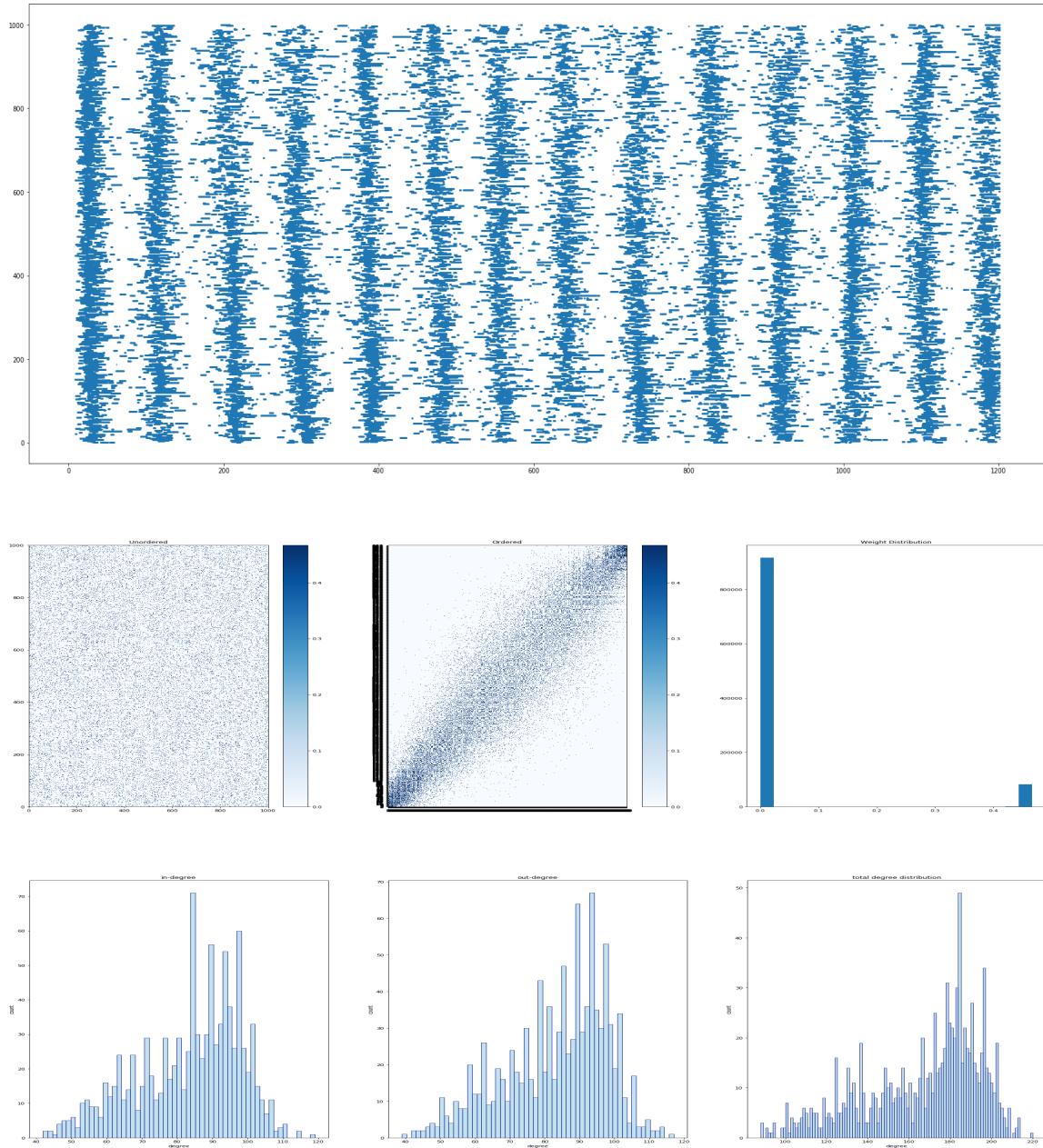
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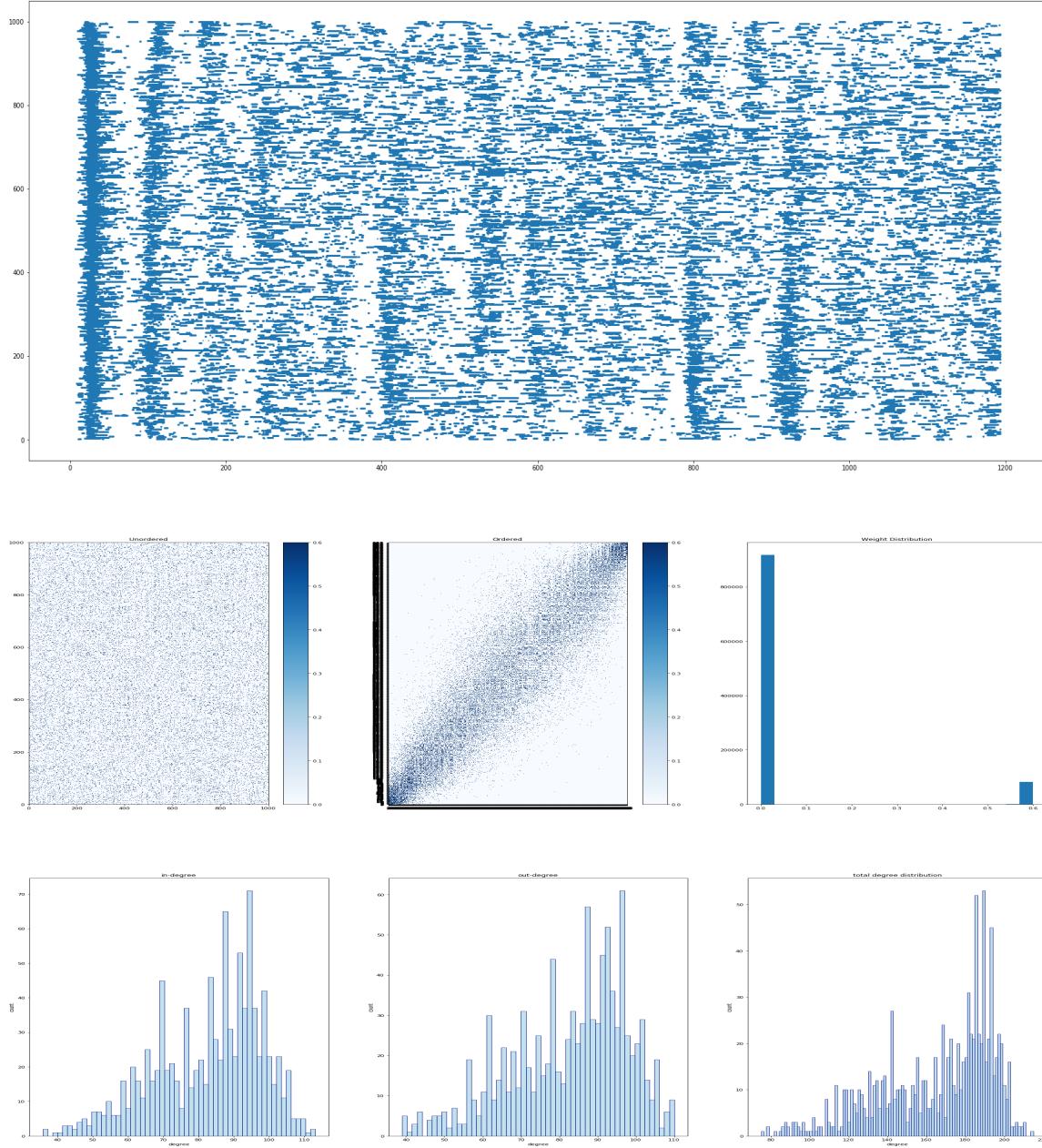
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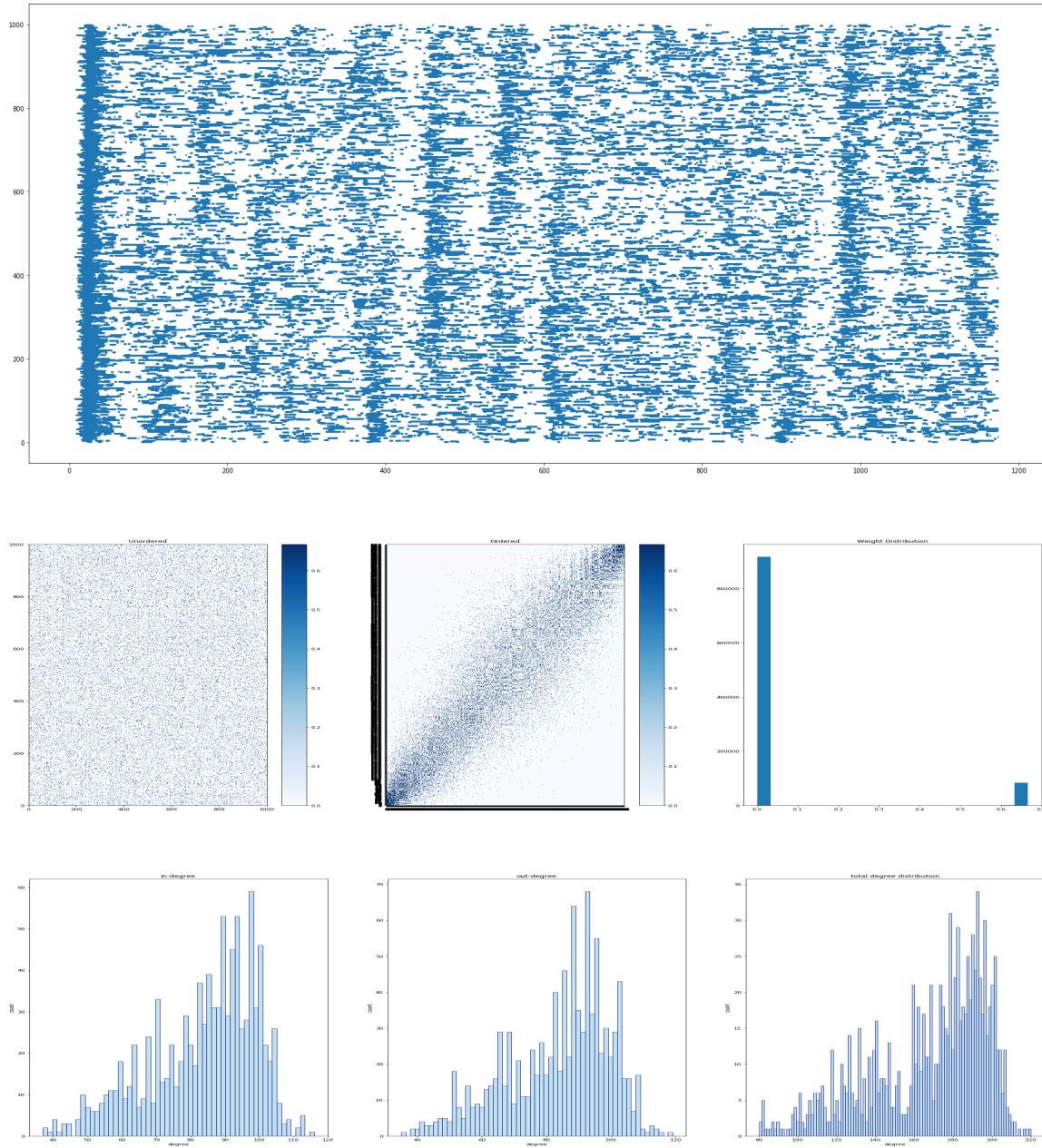
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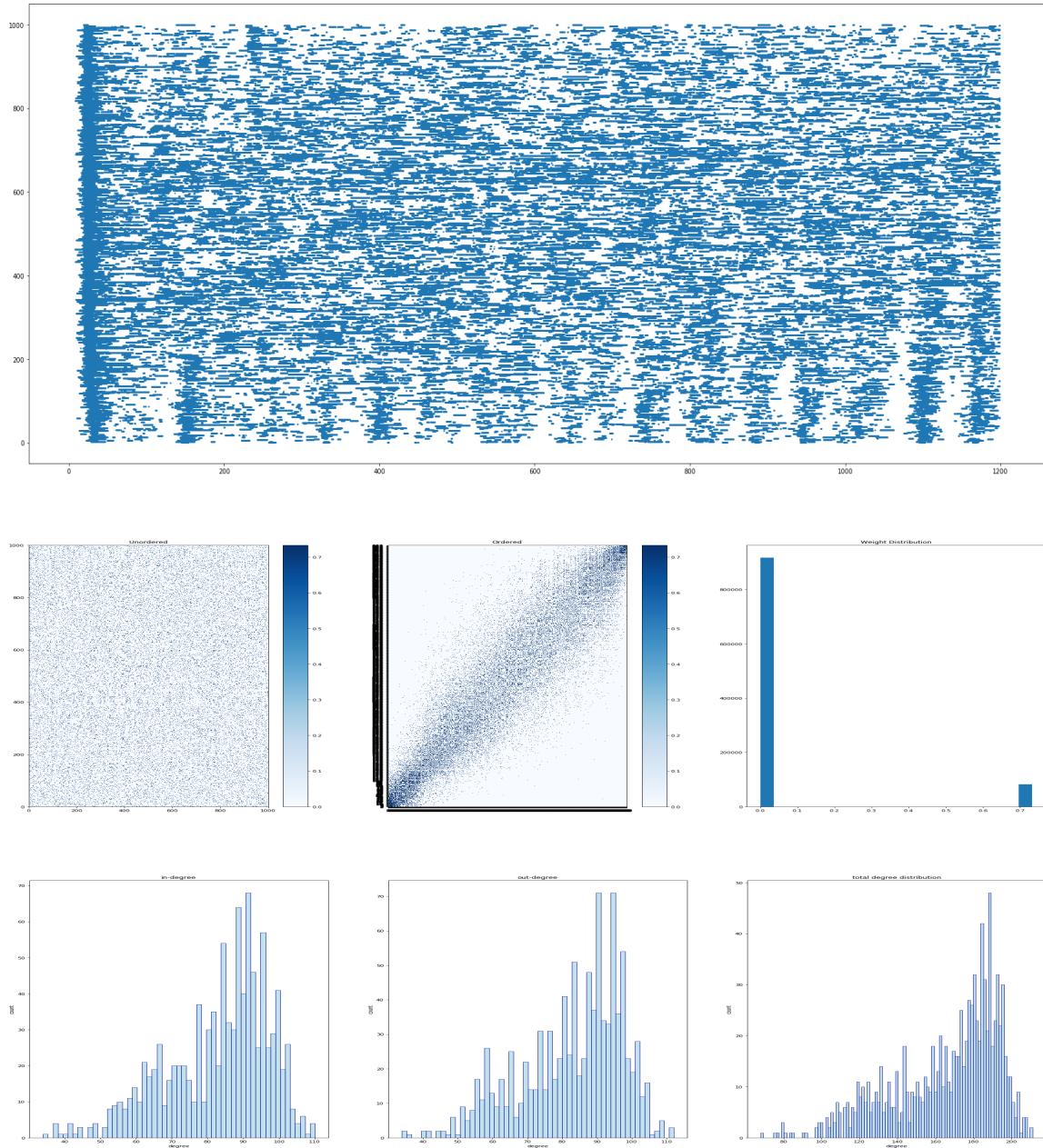
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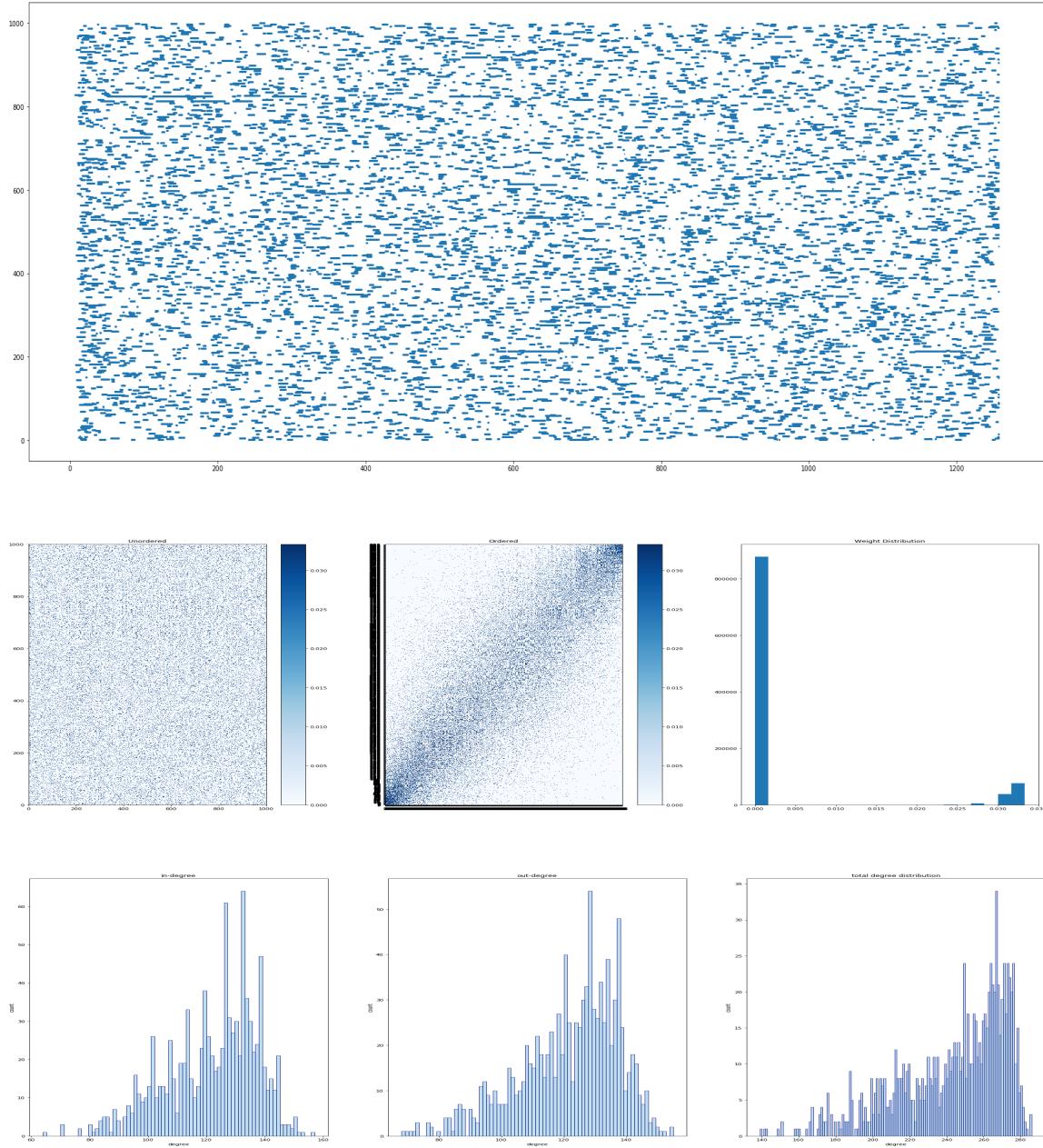
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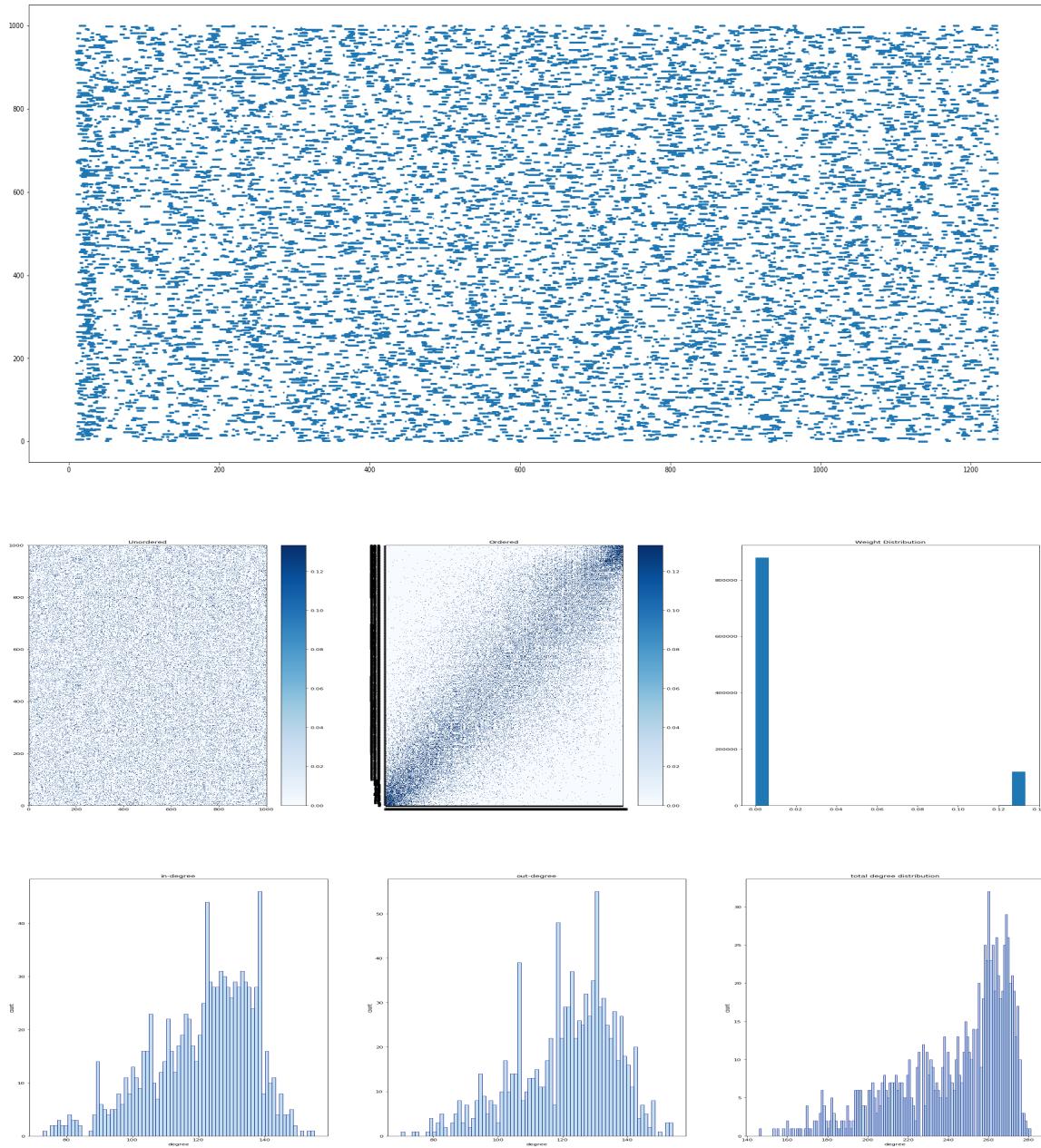
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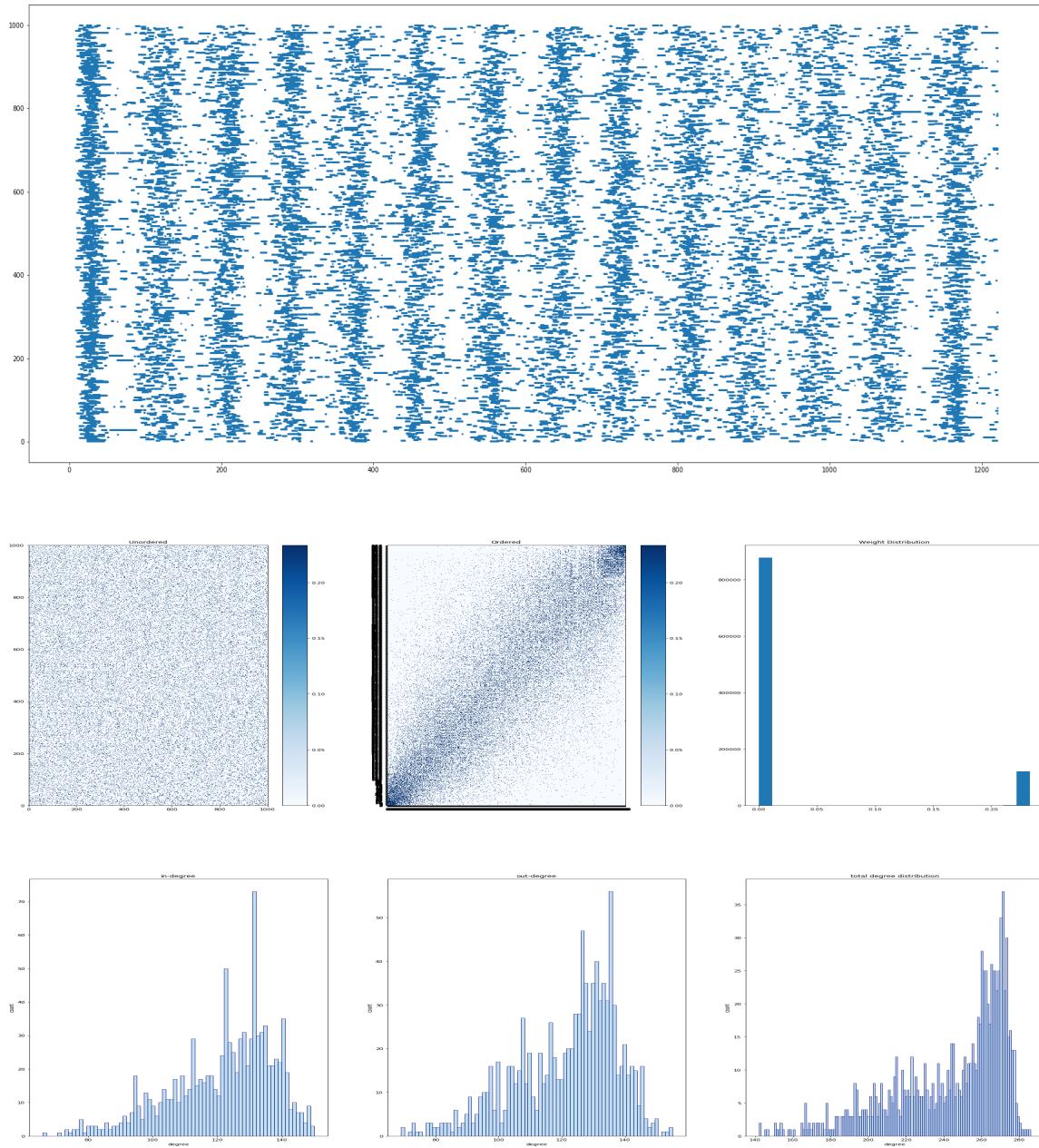
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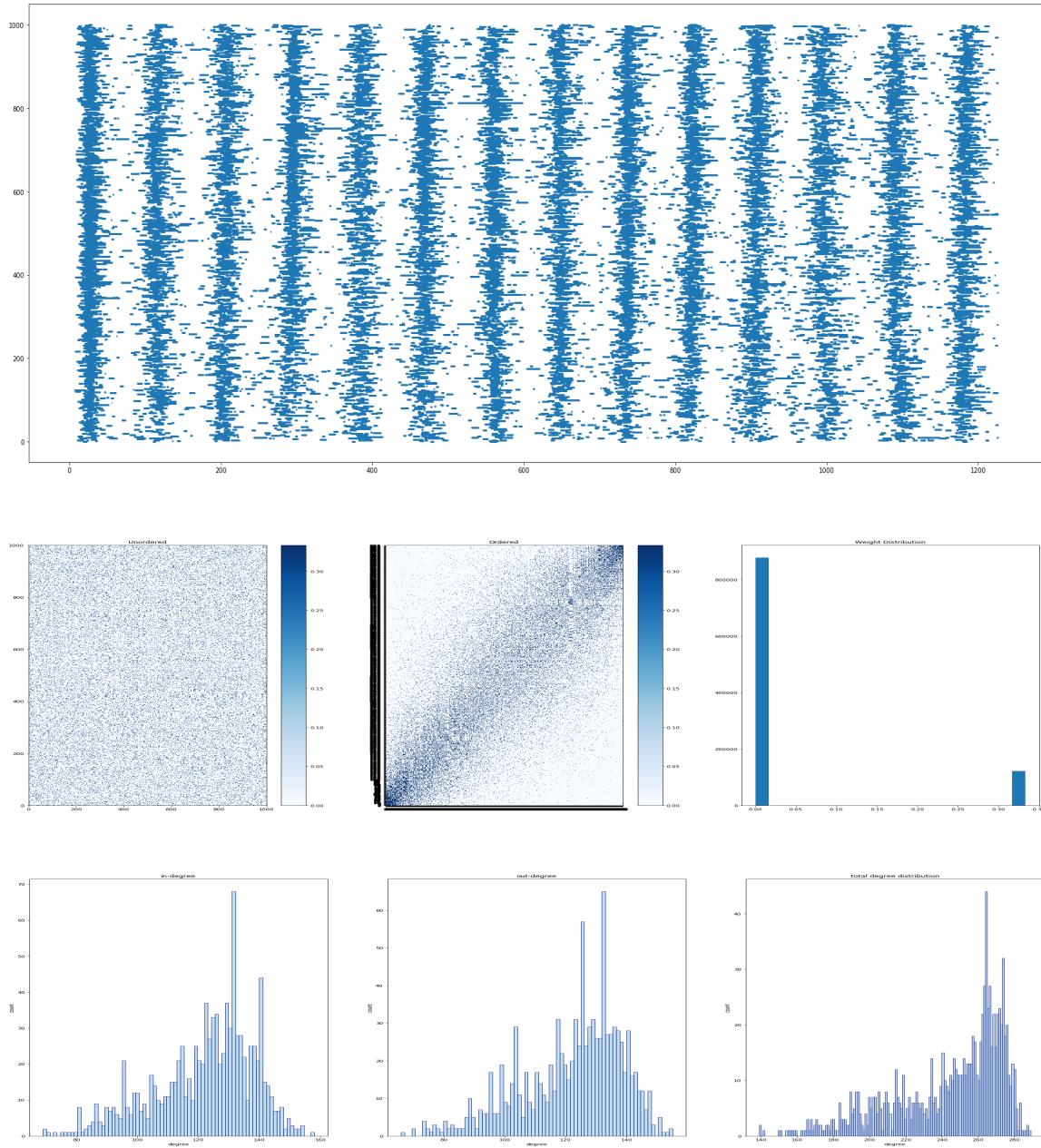
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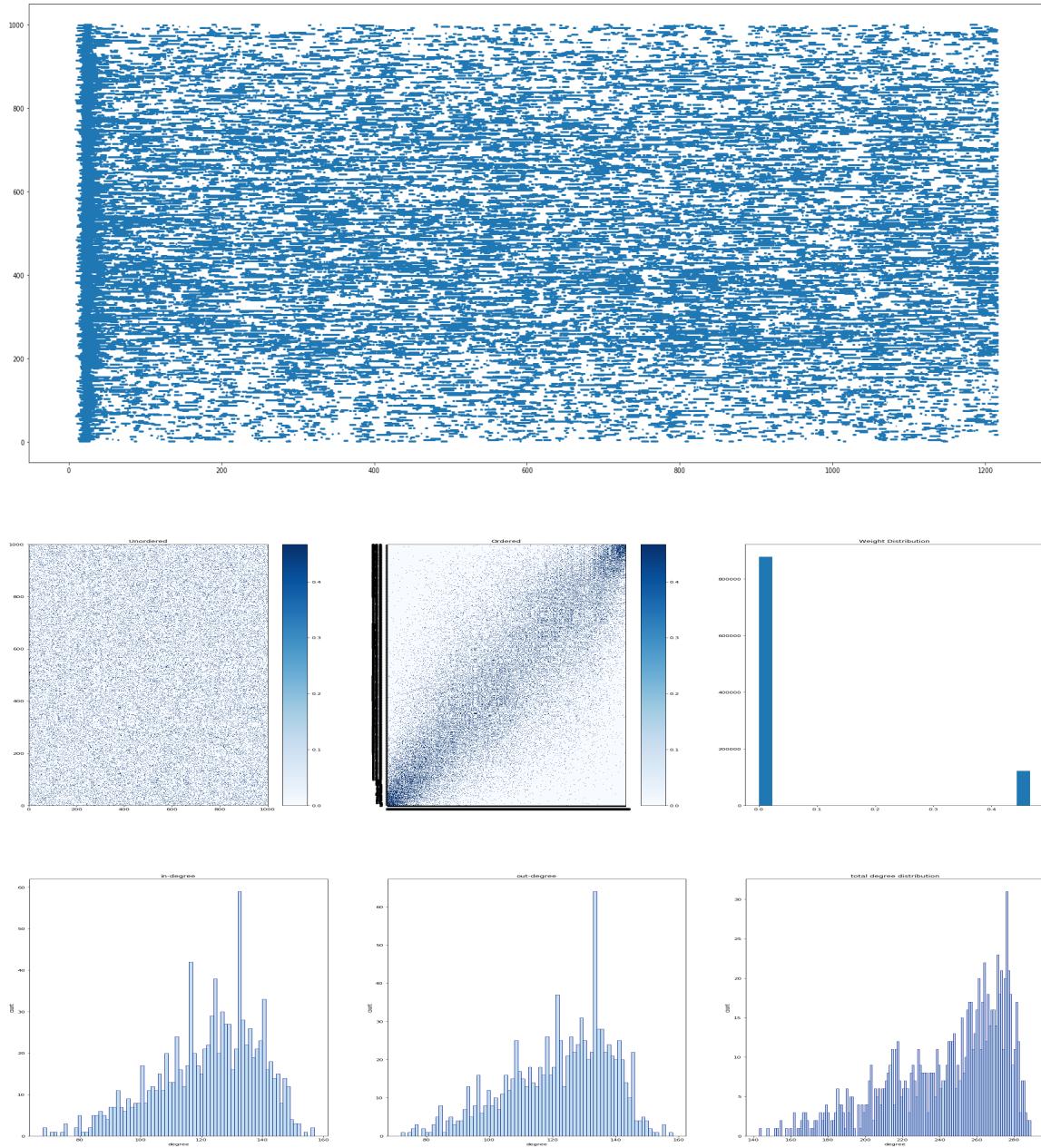
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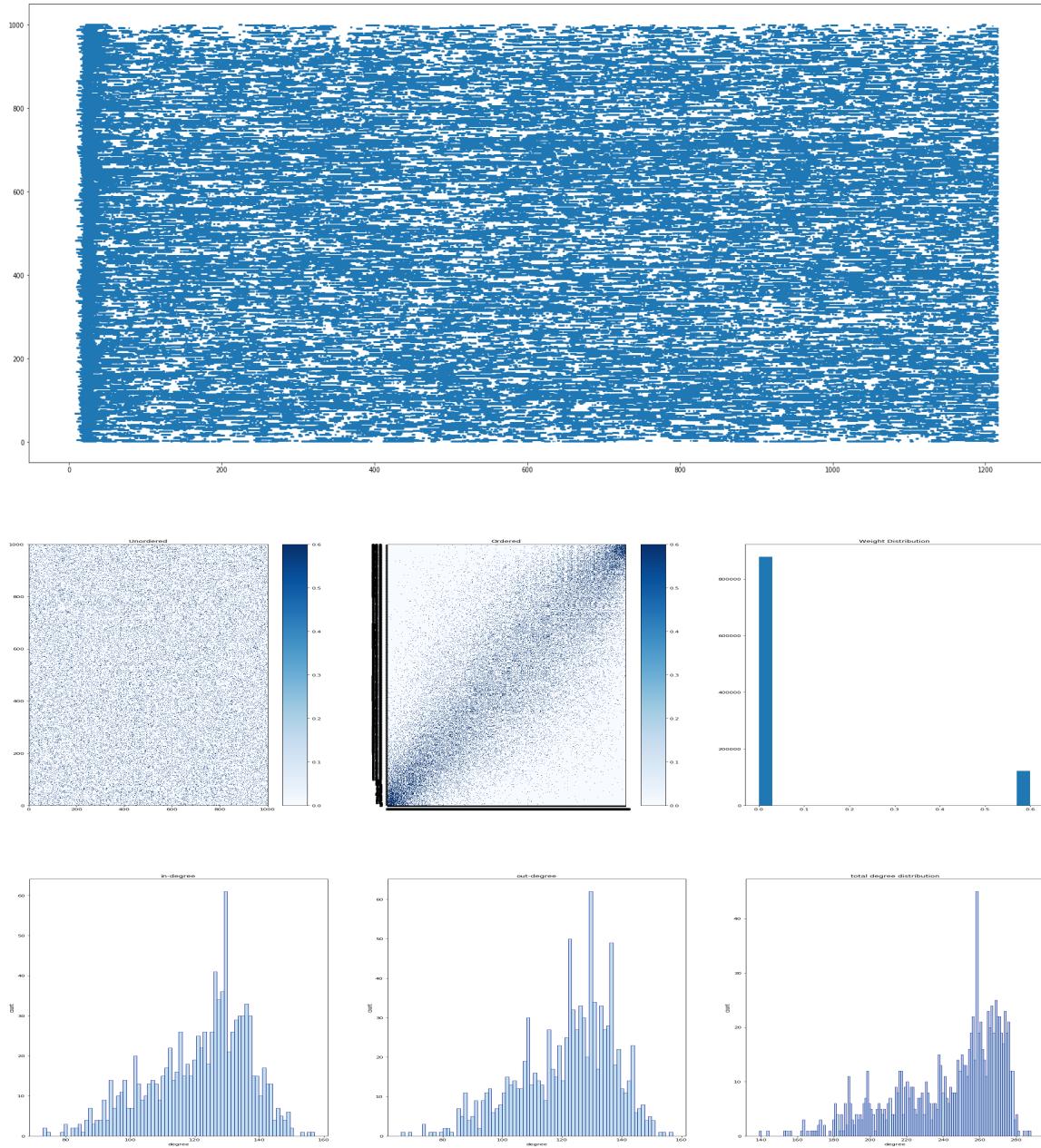
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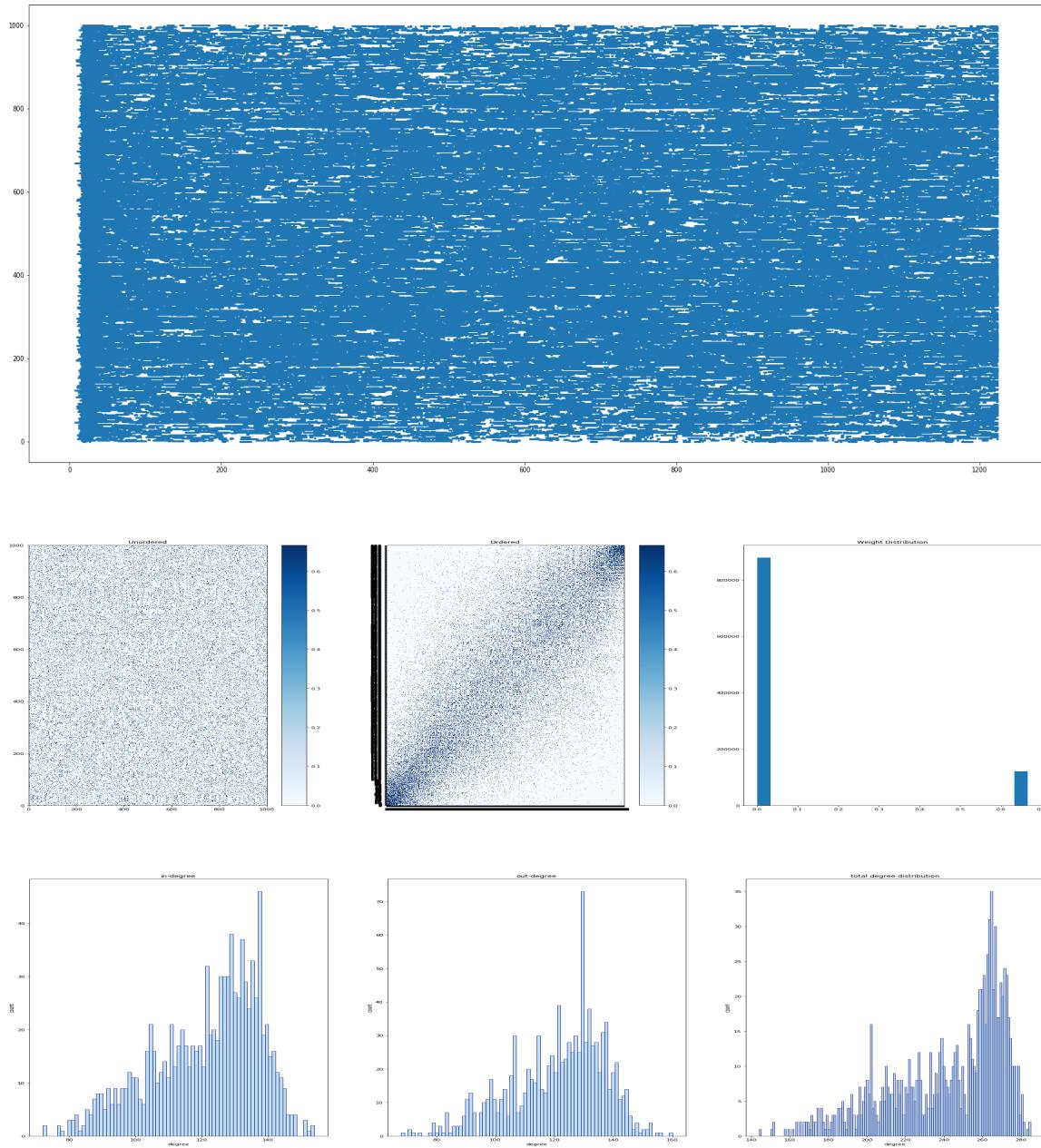
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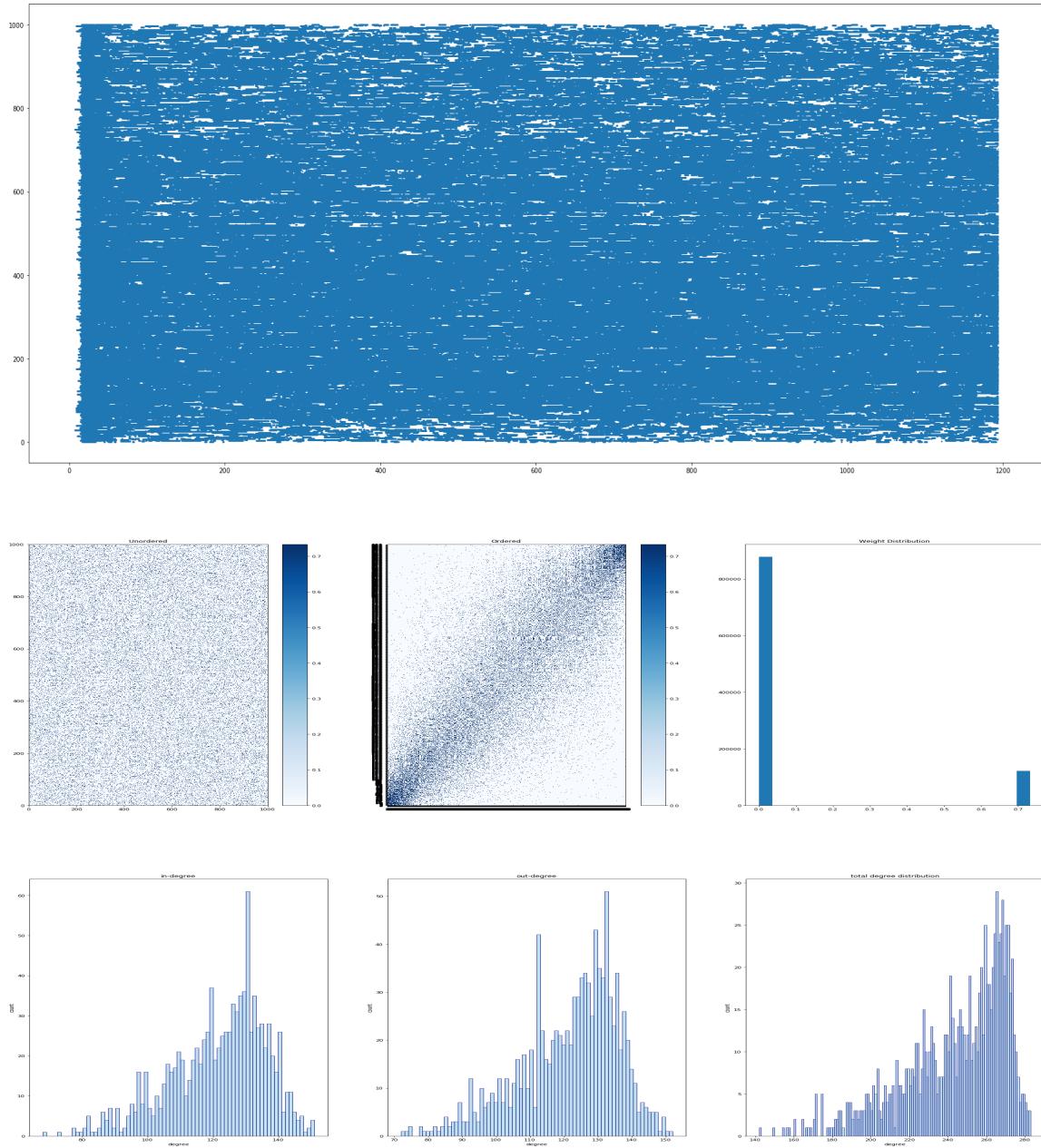
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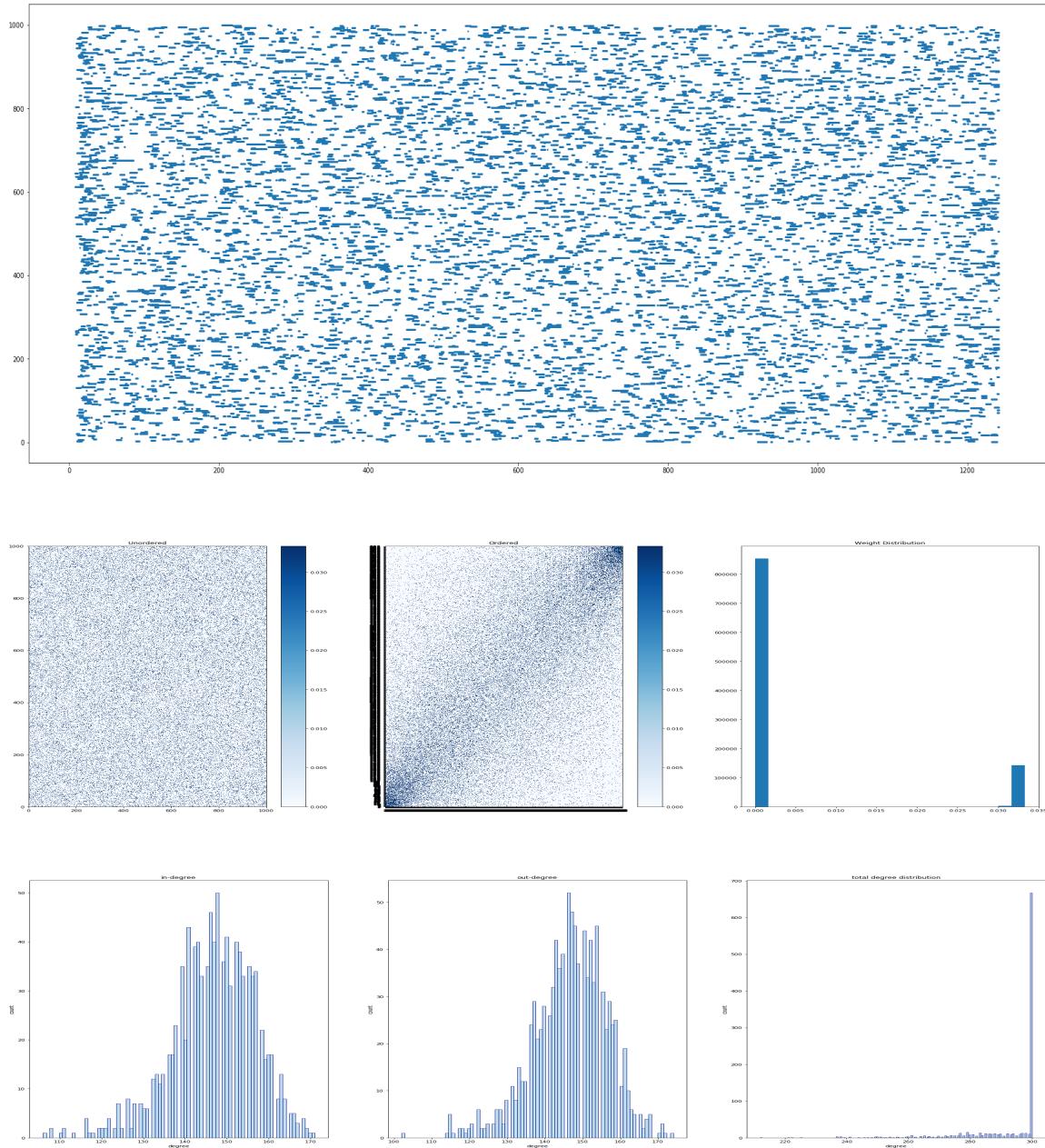
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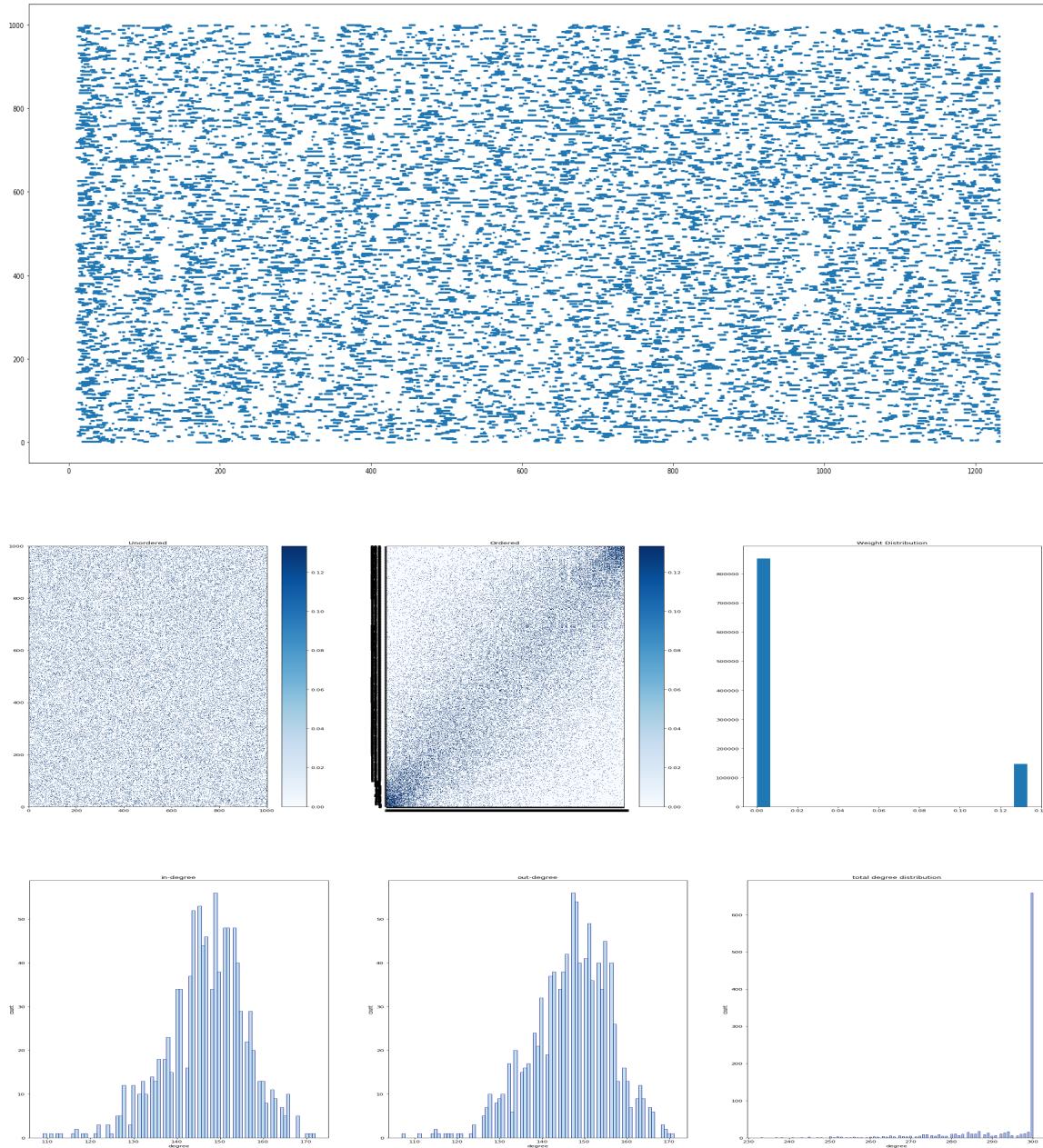
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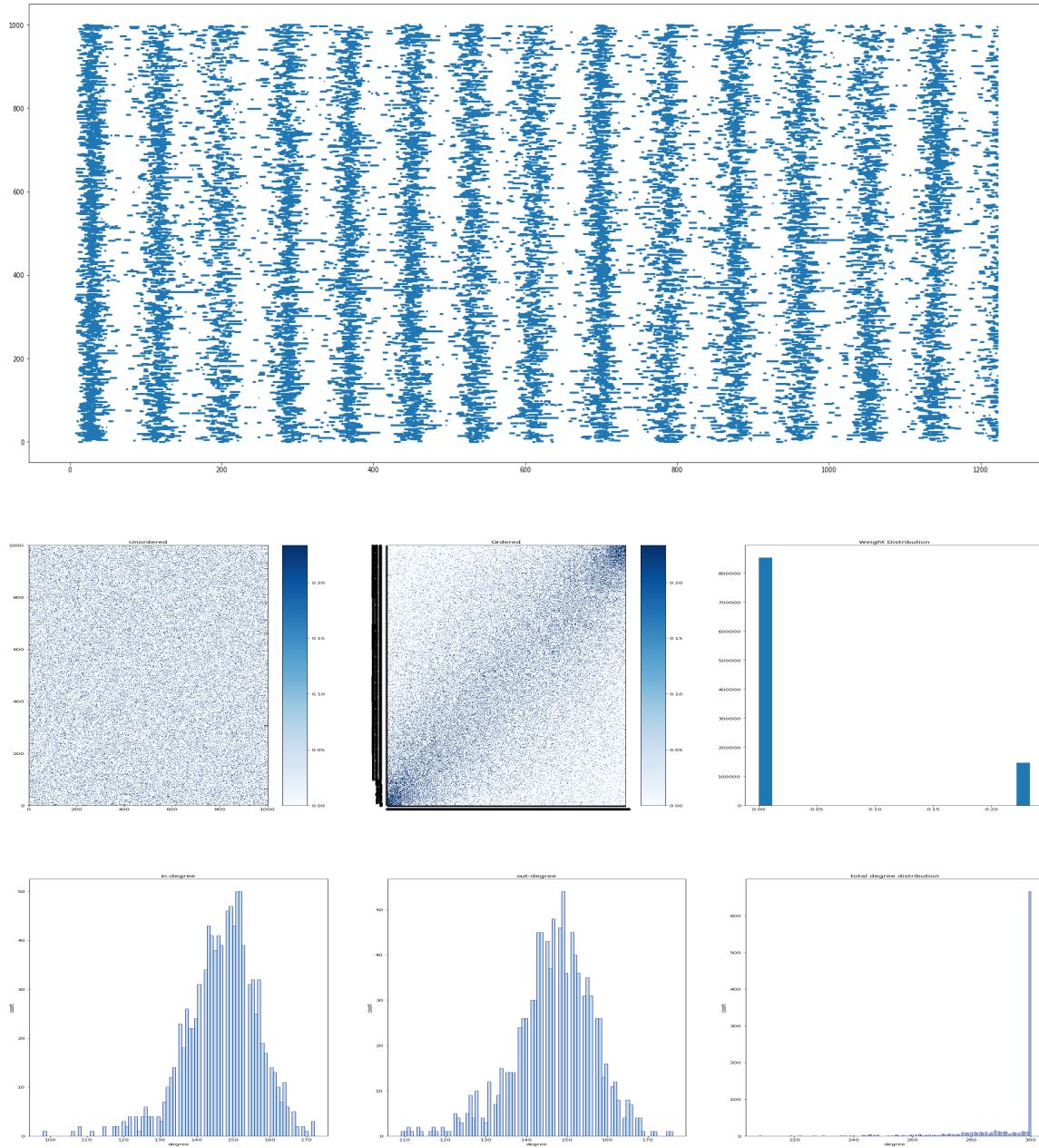
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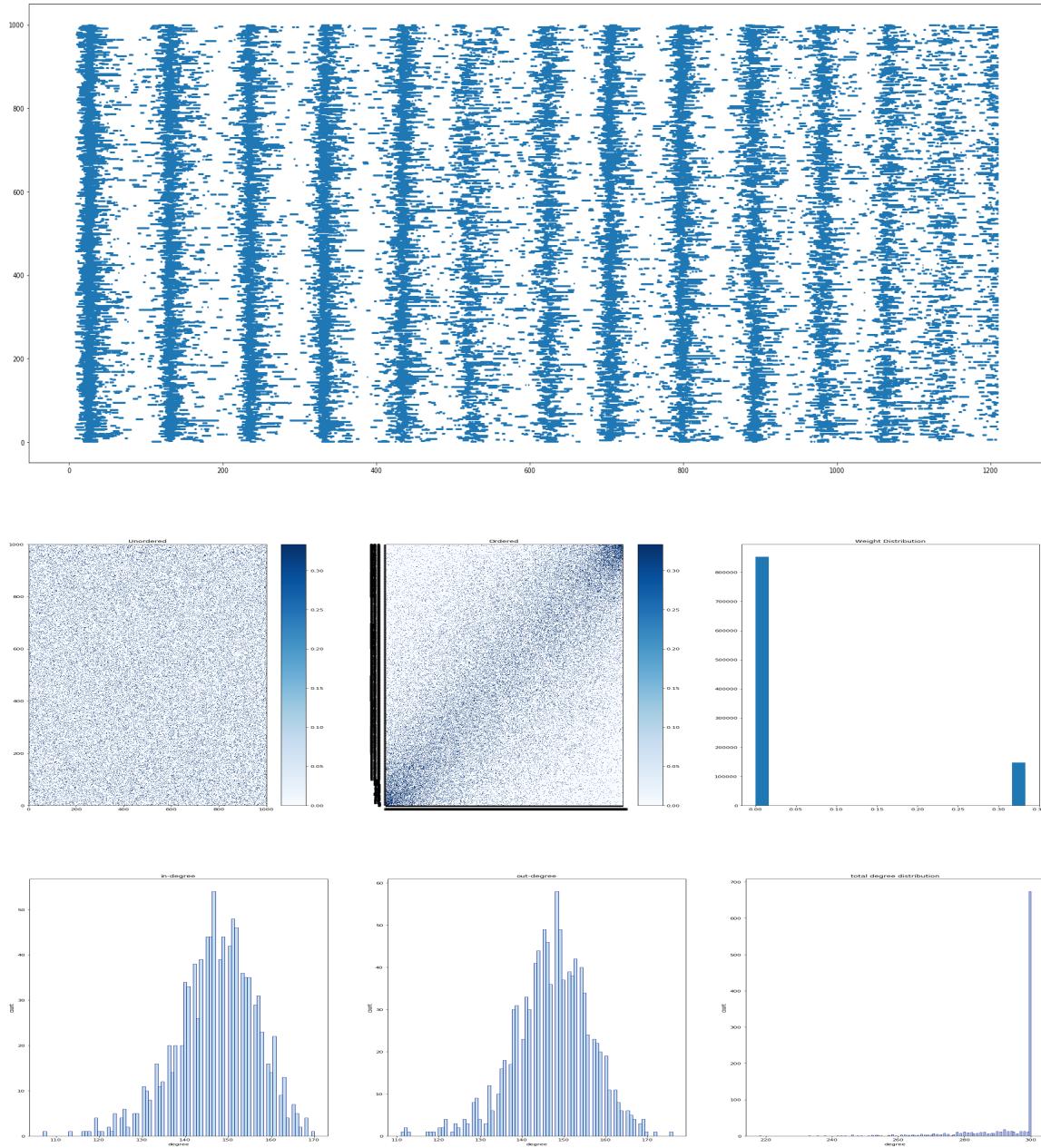
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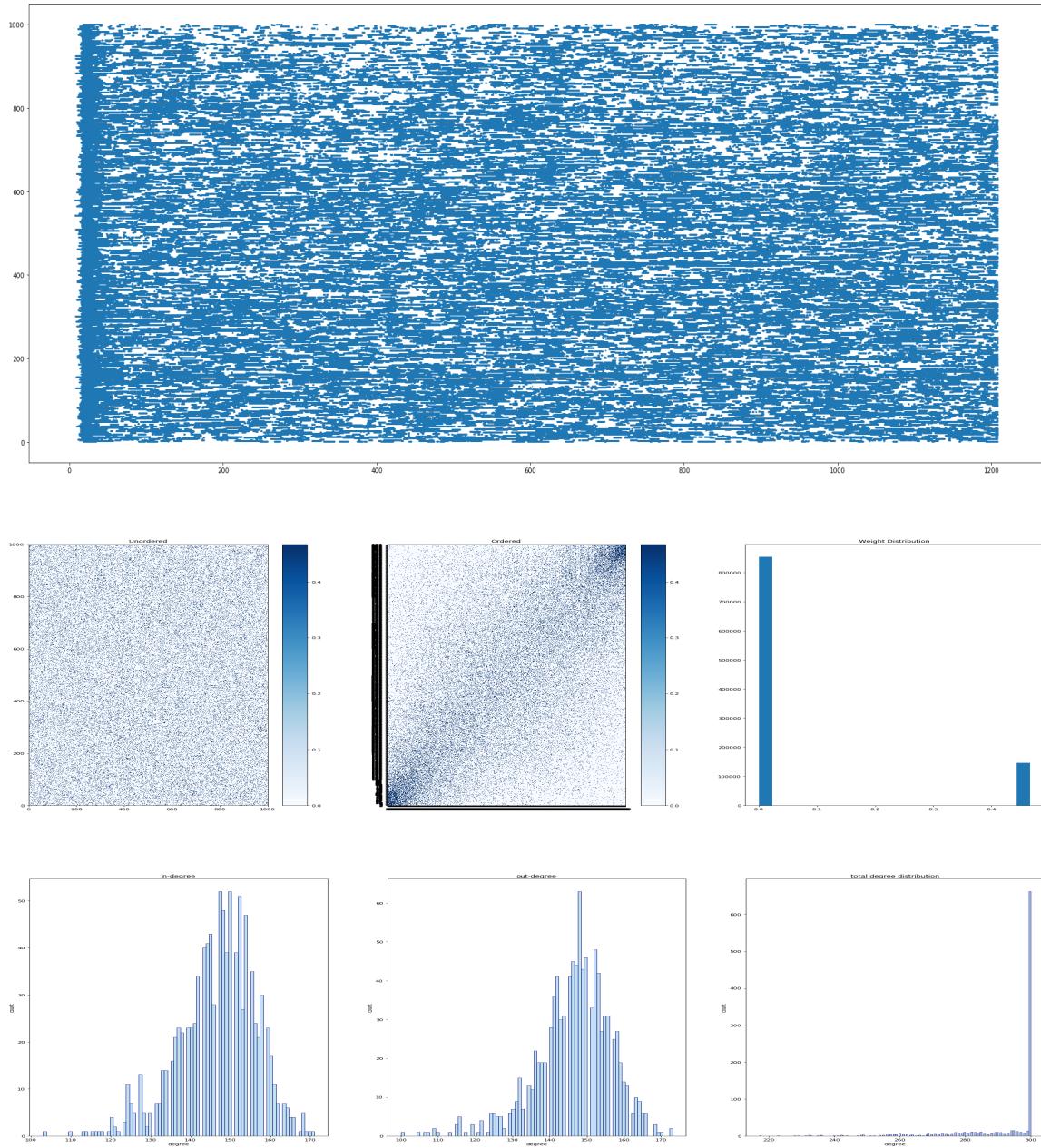
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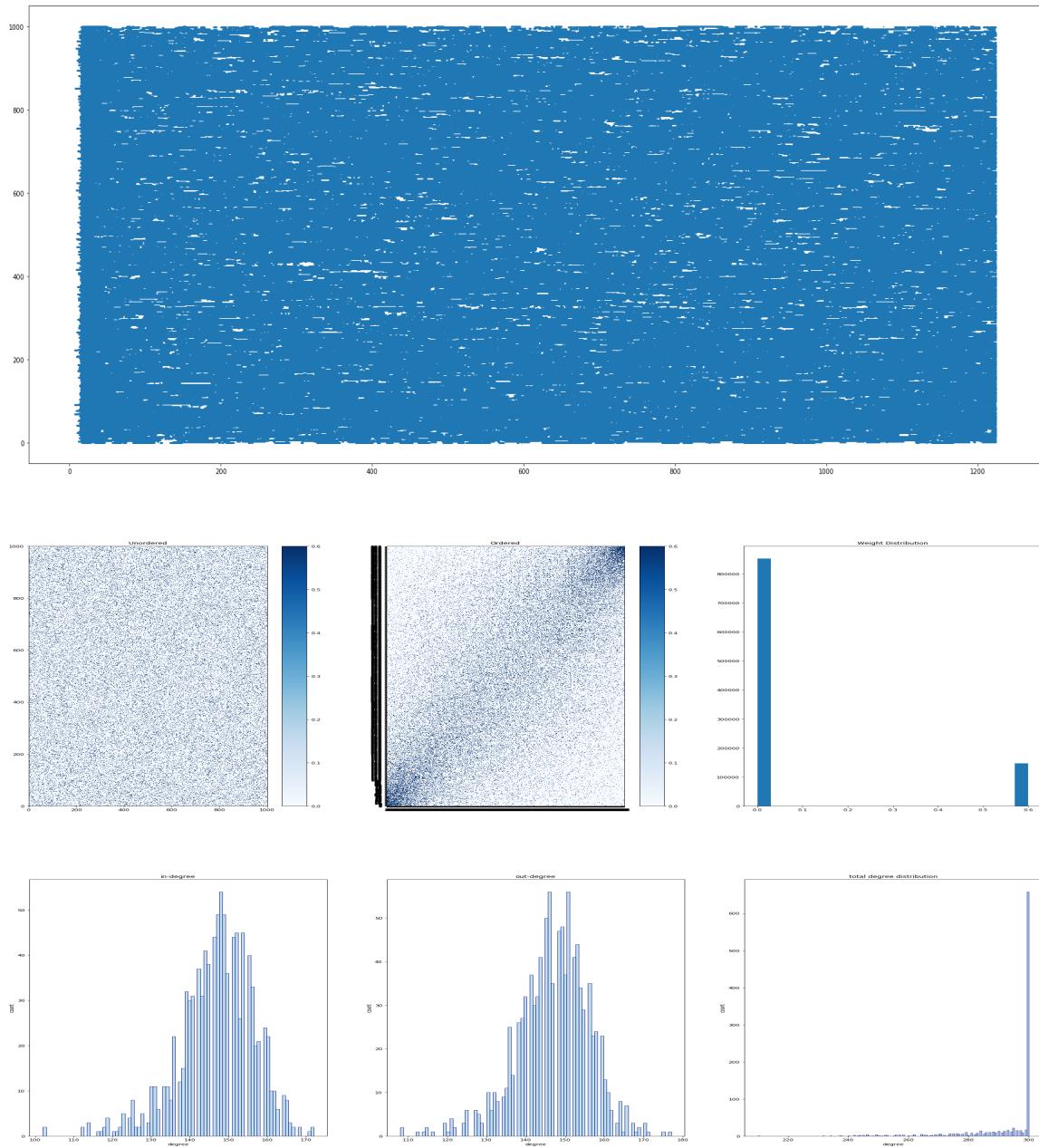
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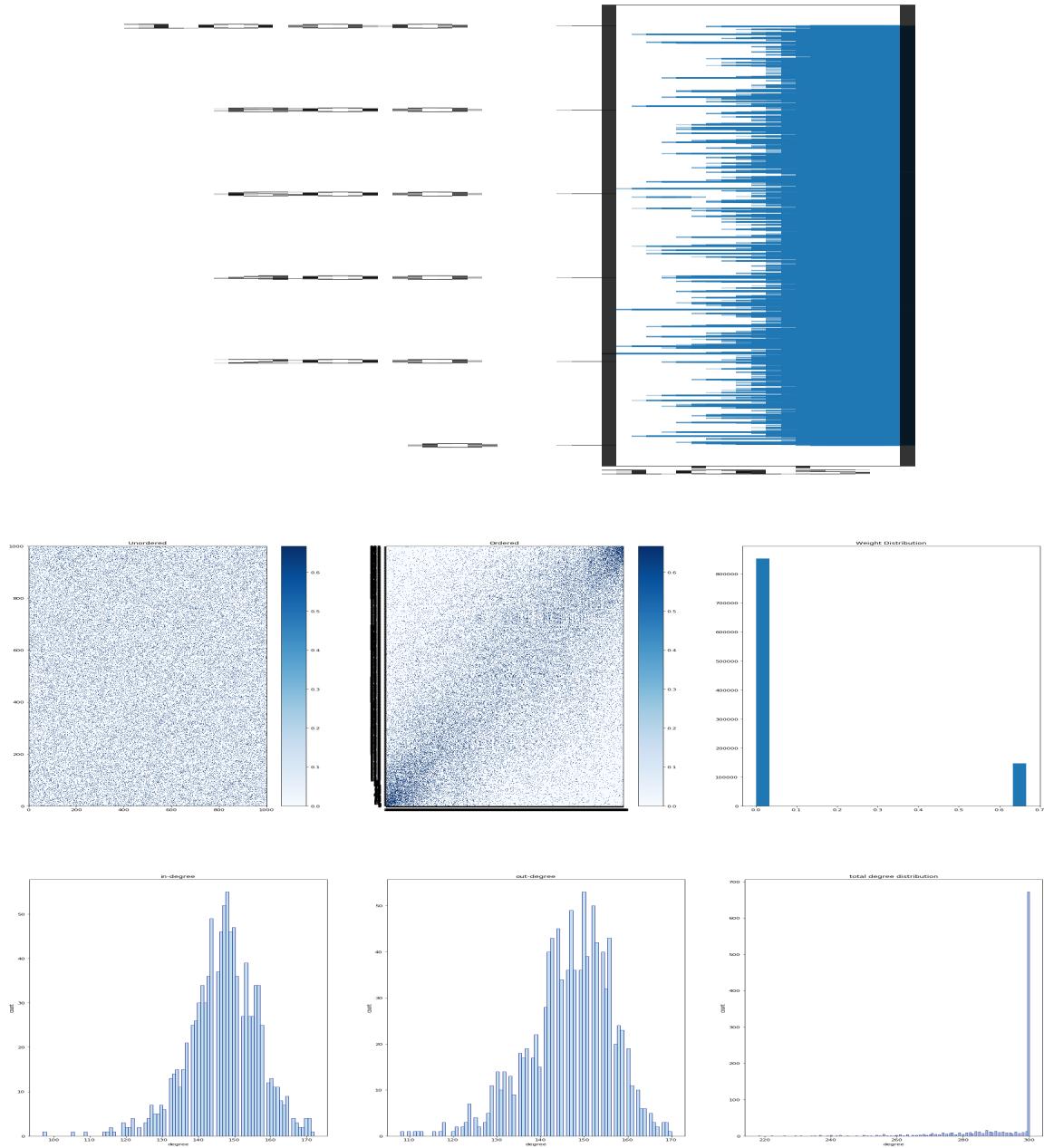
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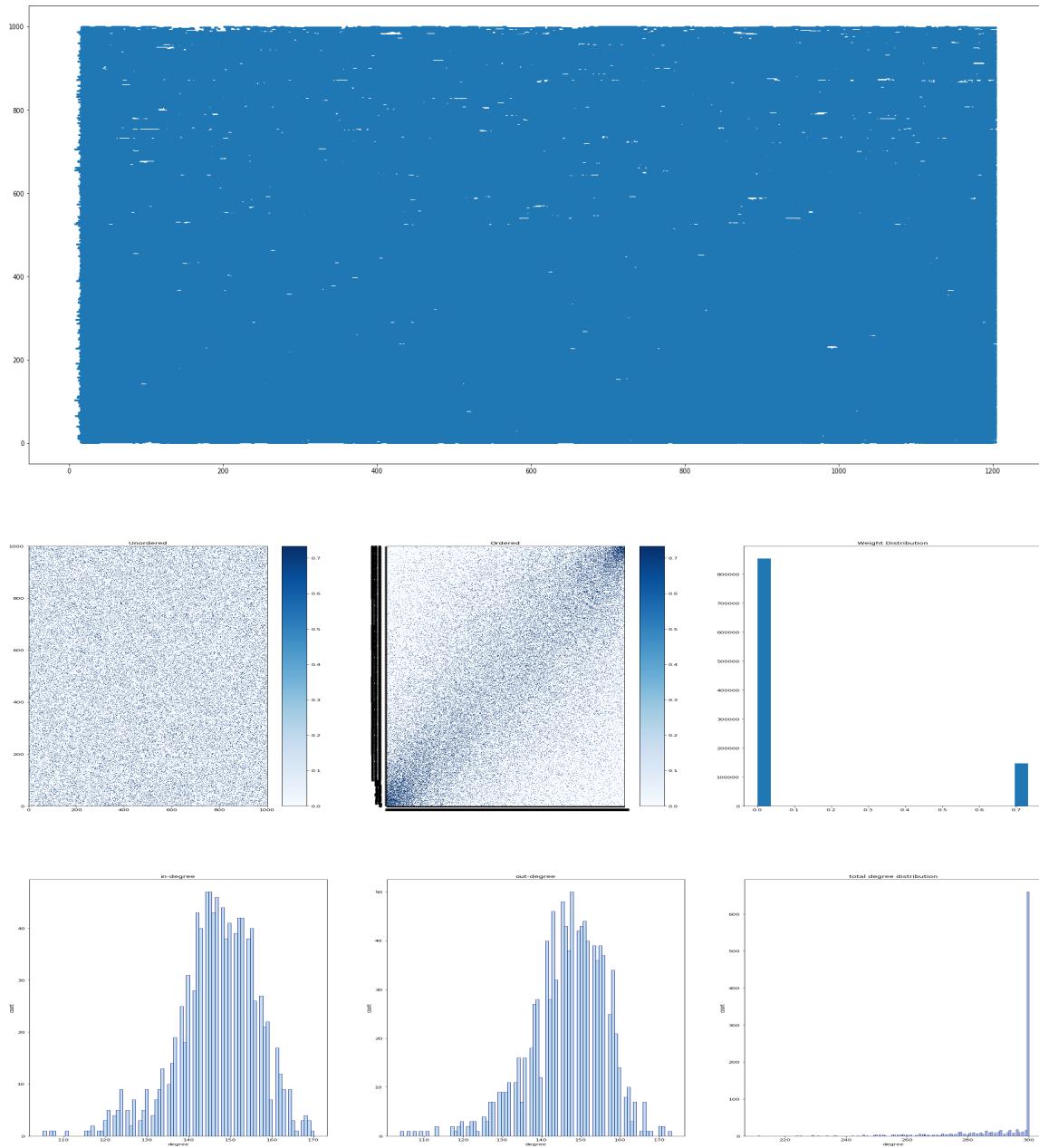
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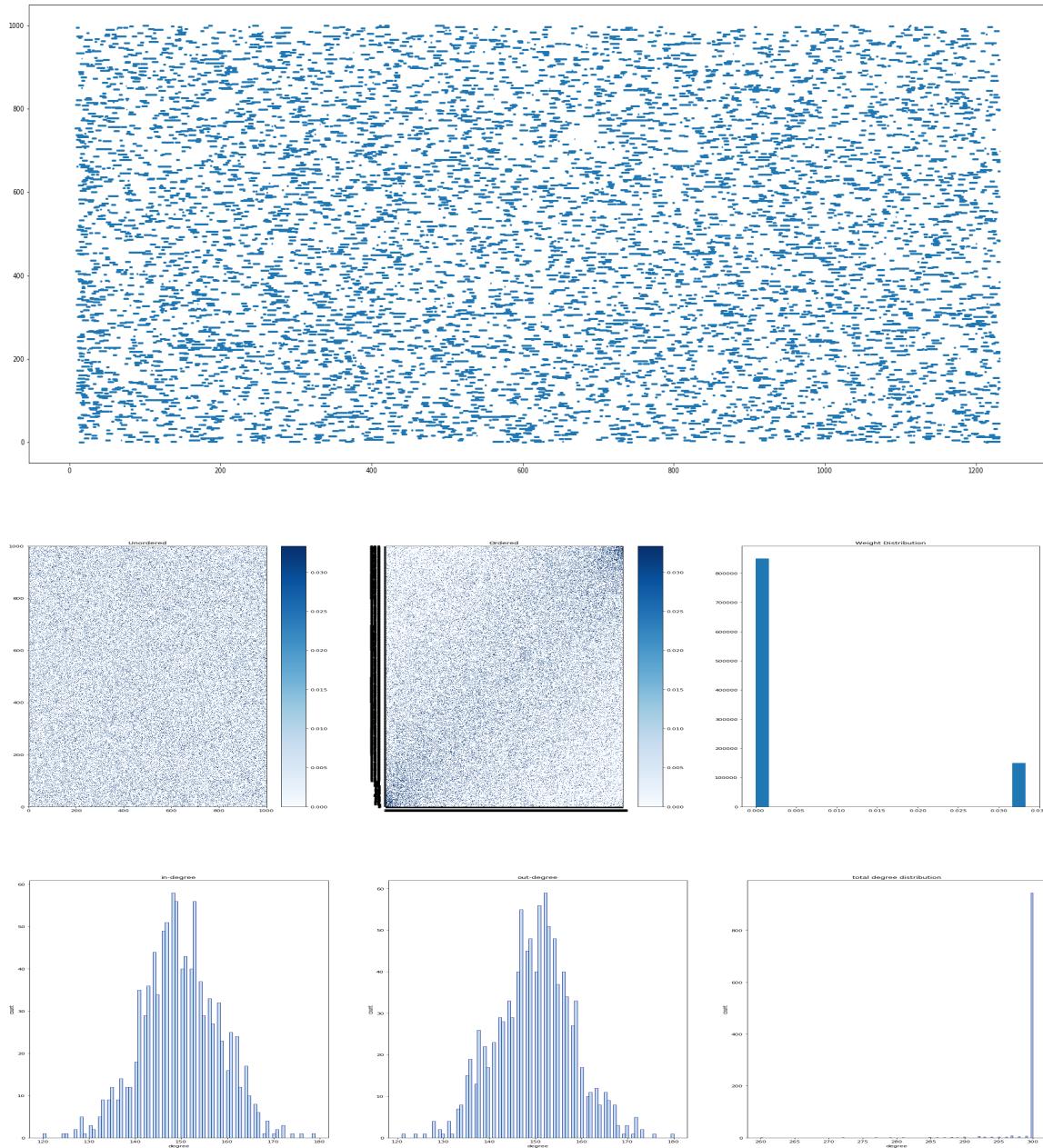
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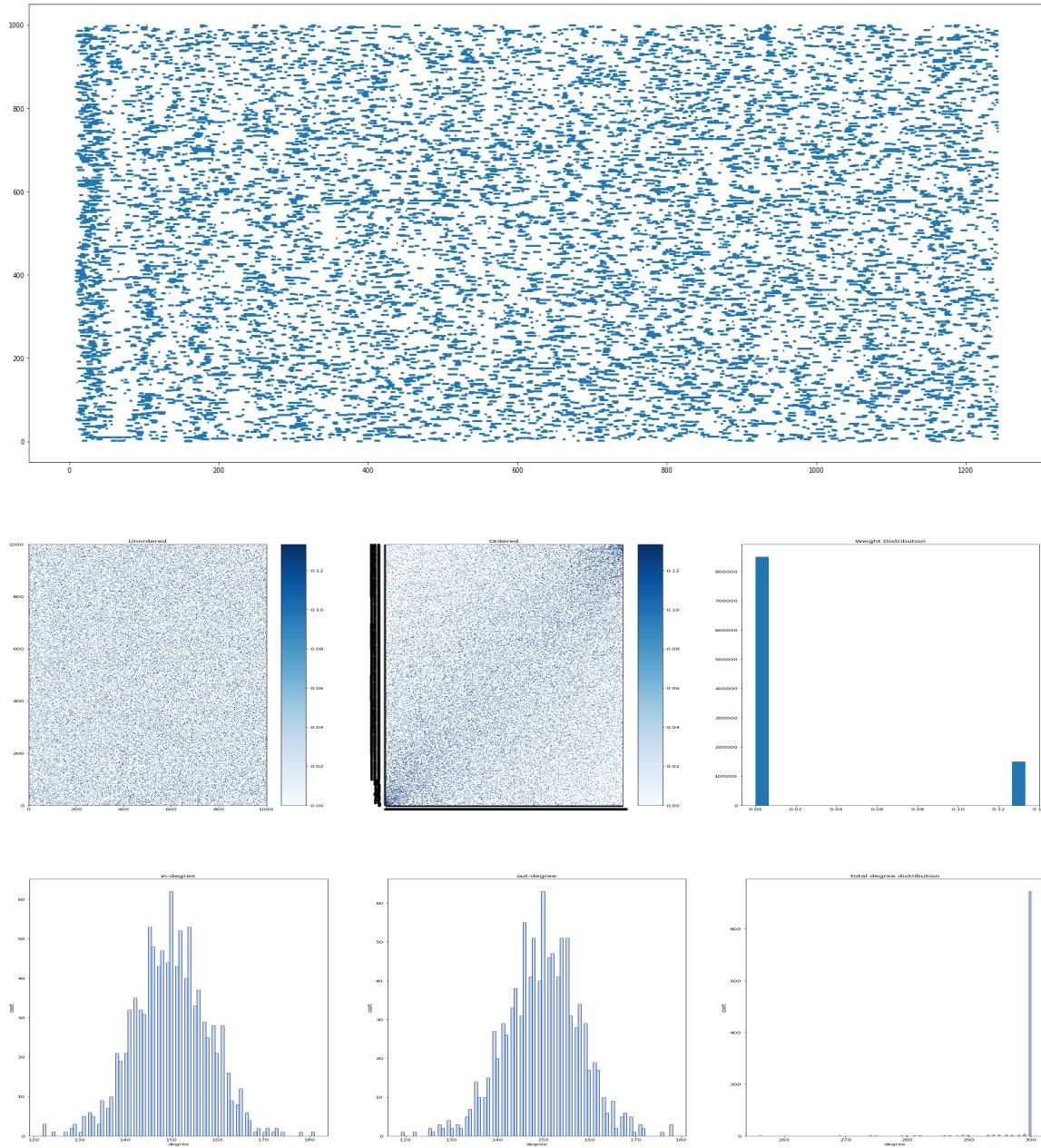
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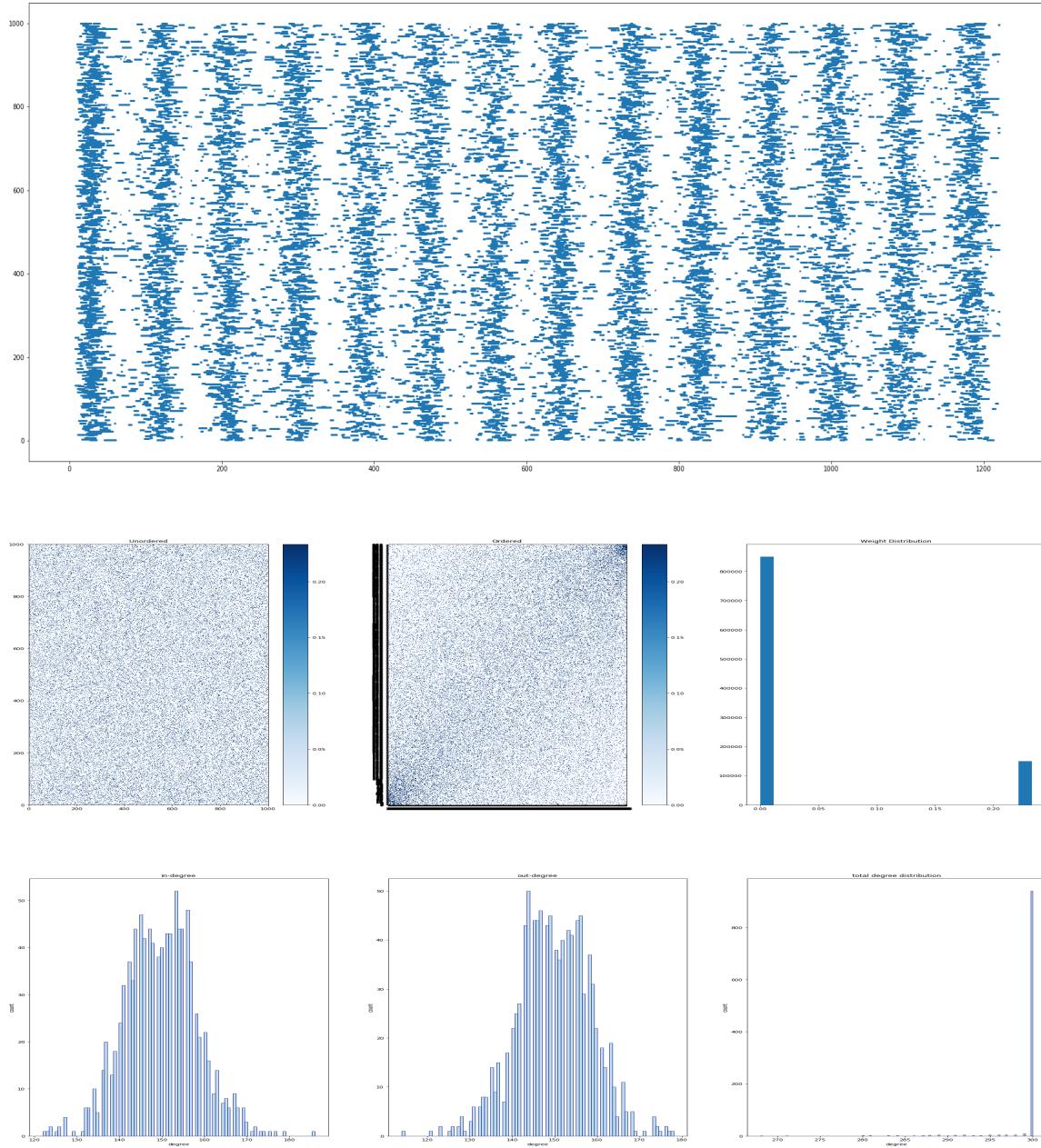
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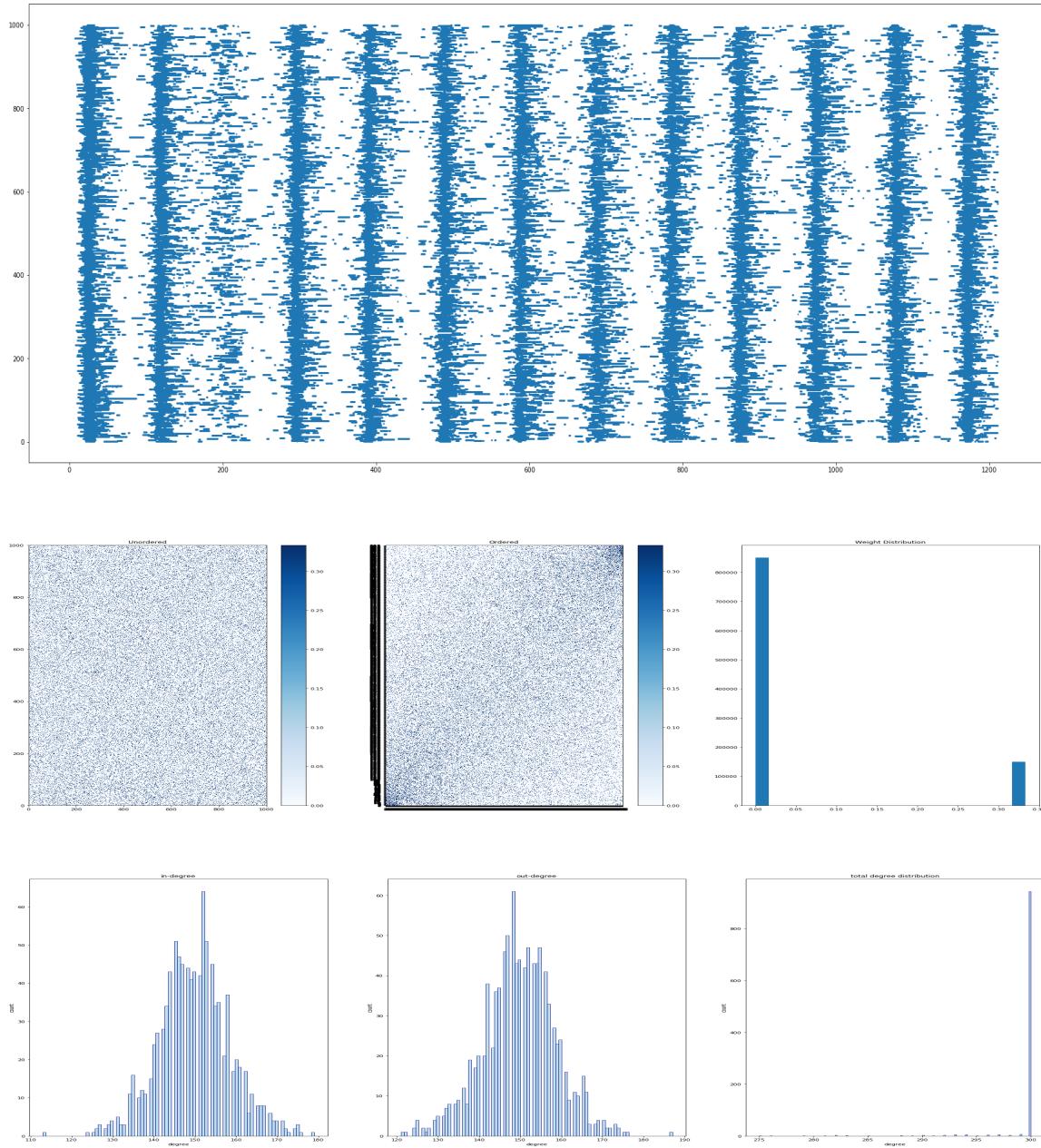
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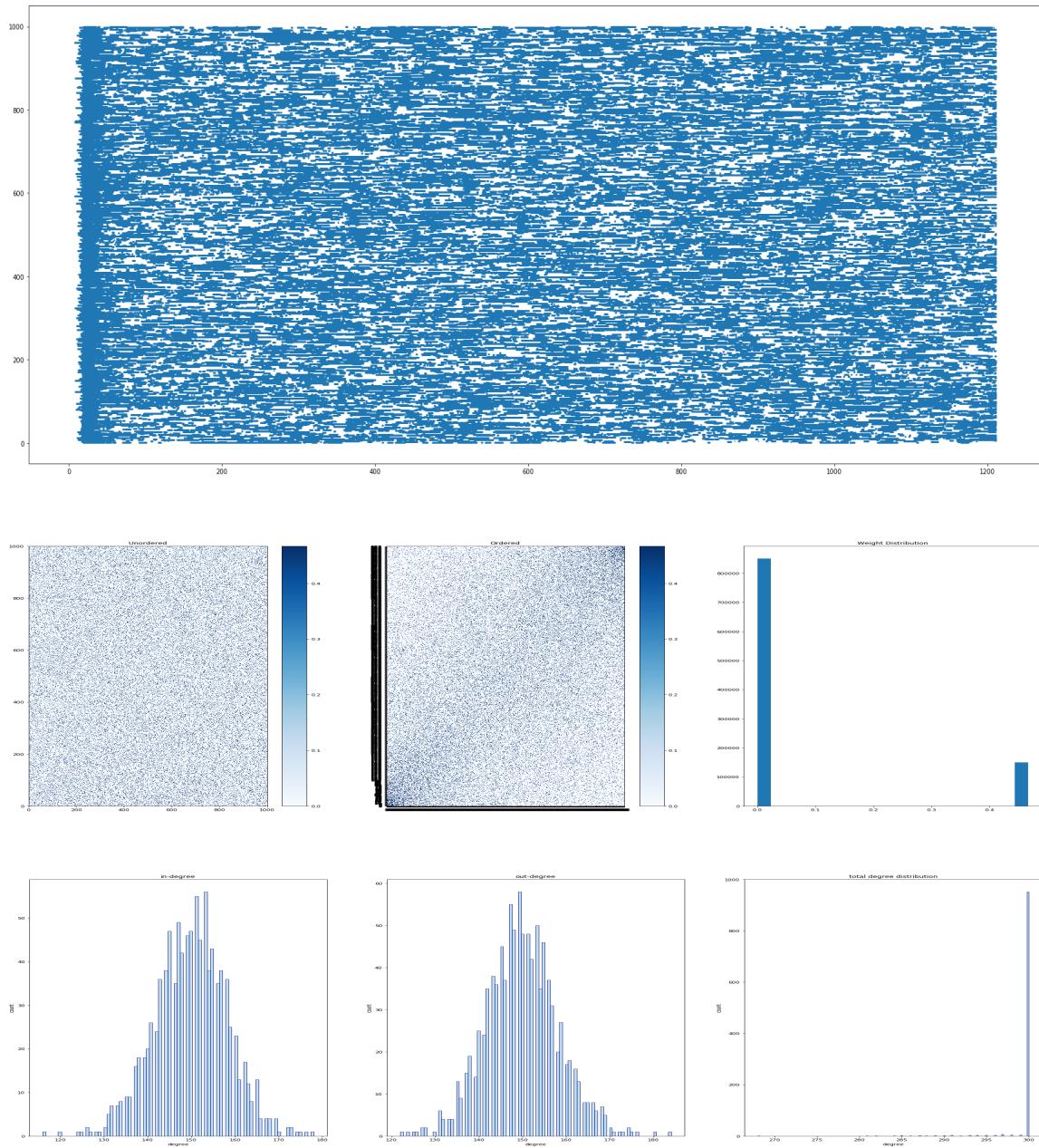
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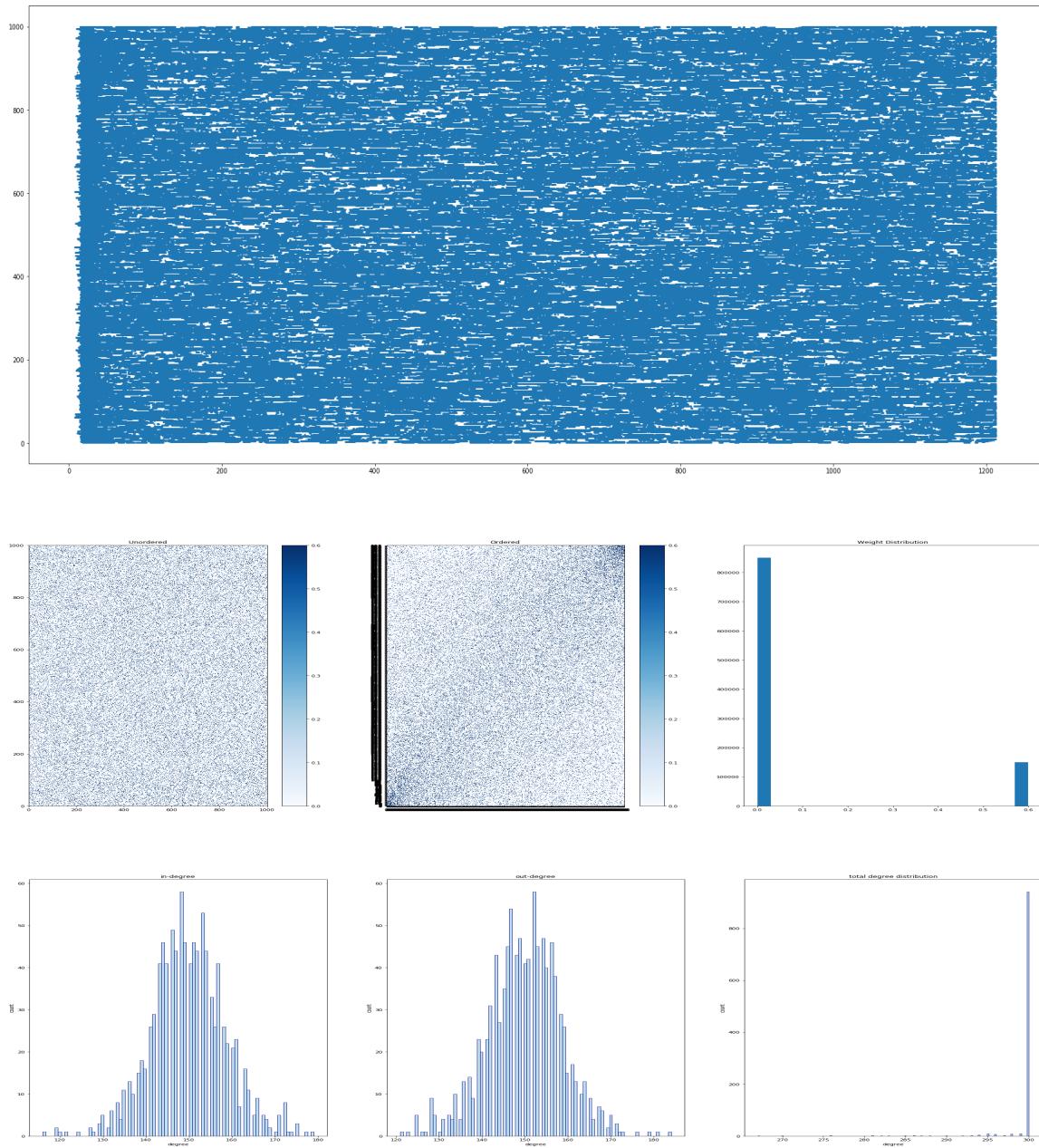
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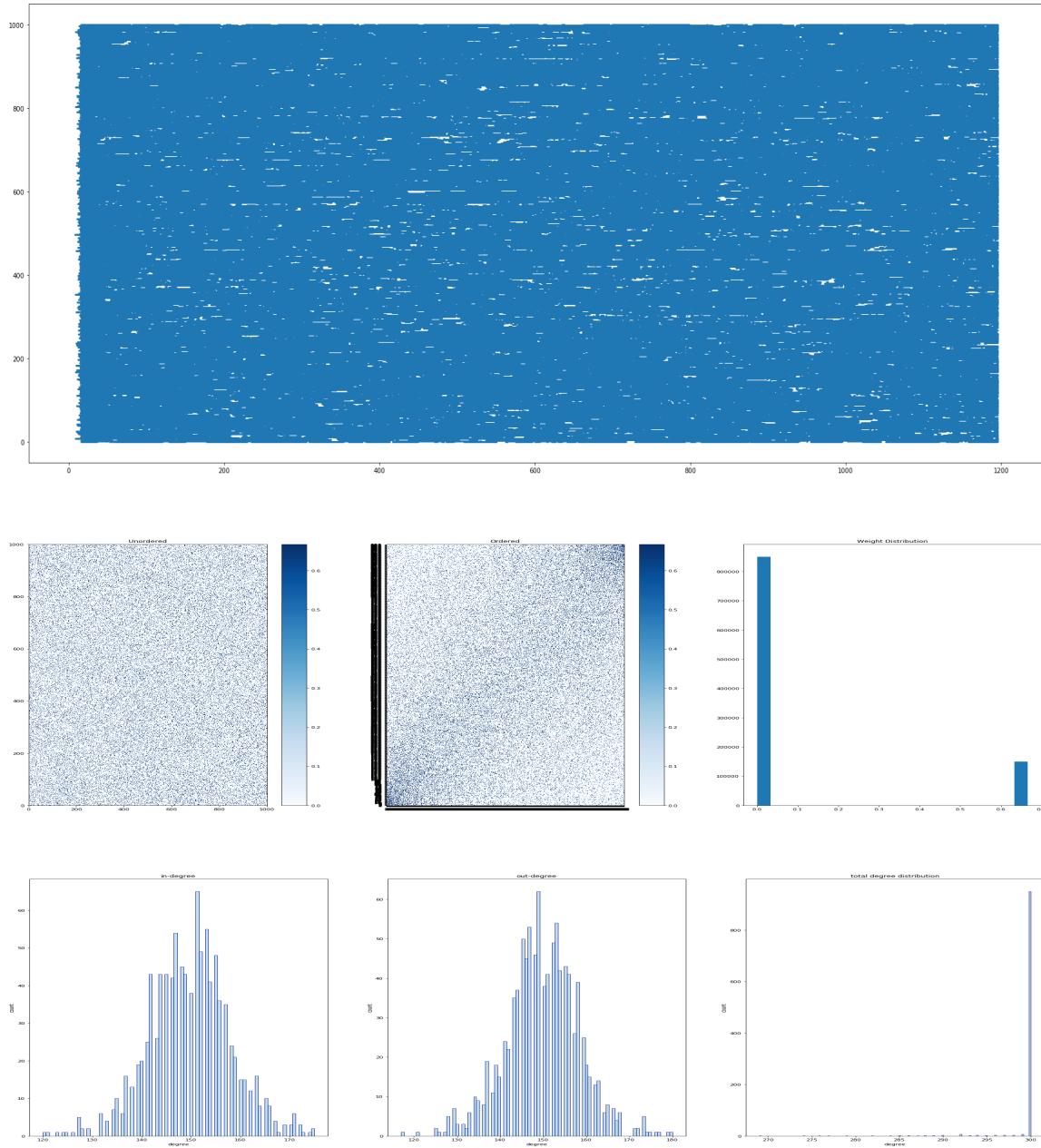
#### 4.29 Spatial Scale=40, Development Time=140



#### 4.30 Spatial Scale=40, Development Time=180



#### 4.31 Spatial Scale=40, Development Time=200



#### 4.32 Spatial Scale=40, Development Time=220

