Lab activity: analysis of transcriptional regulatory networks

1. Session 4: network visualization

In this fourth session of the lab activity we will work on data visualization, leveraging the ability to perform network analysis in Python to identify salient data aspects and the capability of Gephi to render aesthetically pleasant, information rich visualizations.

1.1. Network visualization

This lab activity has an open format. You should work to develop one (or more) visualization of the *E. coli* transcriptional regulatory network that conveys information you deem useful.

1. **(5 points)** Develop a visualization of the *E. coli* TRN using Gephi that conveys information about any aspects of the network you consider relevant. Use a layout algorithm and node/edge graphical attributes that allow for easy identification of the information you intend to convey. Include Python code (if any) developed to derive metrics or other parameters used in the visualization. Report on the network characteristics you intend to convey with the visualization, the motivation for conveying them and the approach used to visualize them.