Graph Drawing

Discrete Based

<div style="border: 1px solid orange;">

BFS layout
- for tree graph

Planar layout
- for planar graph
- [?]
- [?]

Layered graph drawing
- for DAG
- [?]

Spectral layout
- eigenvector of Laplacian

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Continuous Based

Kamada–Kawai (KK)

minimize

$$\sum_{i<j} \frac{k_{i,j}}{2}(d_{i,j} - l_{i,j})^2$$

Fruchterman–Reingold (FR)

minimize

$$\sum_{i<j} \left(\frac{a_{i,j}d_{i,j}^3}{3k} - k^2 \log d_{i,j} \right)$$

$d_{i,j}$: distance between nodes v_i, v_j / $l_{i,j}$: optimal distance / $k, a_{i,j}$: constant

 NetworkX and Graphviz support KK and FR