COMP 5048 Visual Analytics 2020

Assignment 1: Individual work

Deadline: October 15 (Week 7) Thursday 6:00pm (soft copy on **Canvas**)

Task: Construct a good visualisation of ***three*** of the following graphs.

For details, check the information on each link below. (If download links are broken, alternative download links are available on Canvas).

For this assignment, you can use any software you like. You may want to use a simple graph editor, or implement any existing/new algorithms.

This assignment will be marked by the quality of the visualisation, implementation, visual analysis, and self-evaluation.

Data

TWO must be taken from the following A graphs:

A1. **Hrafnkels Saga** from Graph Drawing Contest 2020 (first dataset on http://mozart.diei.unipg.it/gdcontest/contest2020/topics.html)

A2: **K-Pop** from Graph Drawing Contest 2020 (second dataset on http://mozart.diei.unipg.it/gdcontest/contest2020/topics.html)

In addition, you can choose ONE from the following B graphs:

B1. **Graph Drawing Citations** from Graph Drawing Contest 2017
(first dataset on http://mozart.diei.unipg.it/gdcontest/contest2017/topics.html)

B2. **Composers Graph** from Graph Drawing Contest 2011
(http://mozart.diei.unipg.it/gdcontest/contest2011/topic2-2011.html)

B3. **Lindenstrasse** from Graph Drawing Contest 1999
(https://kam.mff.cuni.cz/conferences/GD99/contest/graphs/A.html)

B4. **Biological network** from Graph Drawing Contest 2003
(first dataset on http://vlado.fmf.uni-lj.si/pub/networks/data/gd/gd03/rules03.htm)

B5. **Panama Papers** from Graph Drawing Contest 2016 (First dataset on http://mozart.diei.unipg.it/gdcontest/contest2016/topics.html)

Submission

Min. 6 page report

- 2 pages per graph:
  - 1st page: Visualisation
  - 2nd page: Description, with the following sub-headings:
    1. Tools & layouts
    2. Implementation
    3. Visual Analysis: storytelling, sense-making
    4. Self-evaluation: strengths and weaknesses
- Appendix (no page limit):
  - You can include alternative visualisations using different techniques
  - Include description as above for each alternative visualisation
  - Justify the inclusion of the alternative visualisations (i.e. should be substantially different from each other)
- Include any source codes in your submission
- Acknowledge all your sources

Marking Rubric

The visualisation of each graph (5 marks per graph for a total of 15 marks) will be marked using the following rubric:

- Quality of visualisation (1.5 marks)
- Quality of implementation (1.5 mark)
- Quality of visual analysis, storytelling, sense-making (1 mark)
- Quality of self-evaluation: strengths & weaknesses (1 mark)