Spillover Effects in the Presence of Unobserved Networks

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Replicate

- Please run `master.R` under `code`
- Below I describe how `master.R` run each code, but just running `master.R` is sufficient for reproducing figures in the paper.

1. Replicate Results in Section 6 based on Cui et al. (2015)

- `master.R` will run `Cui/Cui_analysis.R`, which produces `Fig_3.pdf` under `results`
- Running time: 1 min with 2.9 GHz Intel Core i7

2. Replicate Simulation Results in Section 5

- `master.R` will run `Twitter/twitter_simulation.R`, which produces `twitter_sim_output.rdata` under `results`
- After running the `twitter_simulation.R`, `master.R` will run `Twitter/simulation_figure.R`, which produces `Fig_2.pdf` under `results`
- Running time: 10 ~ 15 mins with 2.9 GHz Intel Core i7

Environment

- R (3.6.3)
- macOS Sierra
- 16 GB of memory
- number of cores: 1
- required packages: `Formula_1.2-3`, `estimatr_0.22.0`, `latex2exp_0.4.0`, `MASS_7.3-51.5`

Running Time

- For "Cui et al." results, 1 min

- For “Simulation” results, 10 ~ 15 mins with 2.9 GHz Intel Core i7

Figures and Tables

- the number of figures: 3
  - Figure 2 and Figure 3 are generated in `R` and are in this replication file
  - Figure 1 is not generated by codes
- the number of table: 1
  - Table 1 is not generated by codes