

E6885 Network Science: *Homework #3*

Ching-Yung Lin, Dept. of Electrical Engineering, Columbia University

October 14th, 2013



Homework #3 (Due 10/28/2013)

- Textbook Question 5.2, p. 151: Betweenness variation in the appearance of sampling. Use both the Karate network and extend the 30-company financial network to 300-company network you got in Homework 2 for evaluation.
- Textbook Question 6.2, p. 195: Deriving the limiting power-law behavior of the degree distribution for the Barabasi-Albert preferential attachment model.
- Textbook Question 7.4, p. 244: Tomographic inference of tree topologies based on hierarchical clustering.
- Textbook Question 8.3, p.283-284: Simulation of Network-based epidemic model