

# CS344: HW6

November 16, 2017

- Out Nov 16, Due week of Nov 27. Hand it to your TAs at the beginning of the recitation. No late homeworks please.
- Problem 22.2-8 page 602.
- Problem 22.3-5, Page 611.
- Problem 22.3-13 Page 612.
- Problem 24.3, page 679.
- Given a directed graph  $G = (V, E)$ , its transitive closure is  $G^* = (V, E^*)$  where  $(i, j) \in E^*$  if and only if there is a directed path from  $i$  to  $j$  in  $G$ . Design an algorithm to find the transitive closure of  $G$ . How much is the running time?