ECE 498LV: Problem Set 9
Centrality

Released: Tuesday, April 11
Due: Tuesday, April 17 (in class)

Be sure to show your work.

1. [Eigenvalue Centrality]
   Please complete Problem 7.1 in Newman’s textbook.

2. [PageRank Centrality]
   Please complete Problem 7.2 in Newman’s textbook.

3. [Closeness Centrality]
   Please complete Problem 7.3 in Newman’s textbook.

4. [Betweenness Centrality]
   Please complete Problem 7.4 in Newman’s textbook.

5. [Creativity for a Centrality Measure]
   Please put forth a novel notion of node centrality that might arise in some real application and then define a mathematical centrality measure that captures this notion.