

CSI 445/660 – Network Science – Fall 2015

Information Regarding Term Papers

Recall that students must complete a term paper or a project for the course. The following are some suggested topics for term papers. Here are the rules for term papers.

1. Any student choosing to write a term paper must work by himself/herself. (Term papers are *not* team activities.)
2. Each term paper should be at least 8 pages long and must cite at least 10 references.
3. Term papers must be free of spelling, typographical and grammatical errors to the maximum possible extent.
4. The paper should examine a topic related to Network Science and summarize some of the important results which have appeared in the literature. It should also include a discussion of some possible future research directions.
5. If some aspects of a certain topic were discussed in the lectures, the term paper should go well beyond what was covered in class.
6. The paper should be written in the student's own words; it should not take text verbatim from the references. (If there is need to directly quote a statement from a paper, the quote should be properly attributed.)
7. The deadline for completing term papers or projects is Monday, December 14, 2015.

List of Topics: A list of possible topics for term papers is given below. (The list is in no particular order.) Students may also choose topics which are not in the following list.

- Graph theoretic and algorithmic results for signed graphs.
- Trust issues in social networks.
- Community detection in social networks.
- The concept of network entropy and its applications to social networks.
- Mining links in social networks.
- Graph mining and its applications to social networks.
- Privacy/security issues in social networks.
- Algorithmic techniques for massive graphs.
- Maximizing the spread of information/influence in social networks.
- Blocking the spread of epidemics in social networks.