

**CSC 641 Network Science**  
**Fall 2018**  
**Instructor: Dr. Natarajan Meghanathan**

**Assignment 2: Community Detection Algorithms for Complex Network Analysis**

**Due: November 13, 2018 @ 7.30 PM**

**Submission:** Softcopy emailed to [natarajan.meghanathan@jsums.edu](mailto:natarajan.meghanathan@jsums.edu)

**Instructions:**

Review the literature on community detection algorithms for complex network analysis and write a survey paper of length 5 pages to 10 pages. You should cover at least two algorithms for detecting overlapping communities and two algorithms for detecting non-overlapping communities (**other than those seen in class**). Your paper should have an abstract, introduction, description of the four or more community detection algorithms (as mentioned above) from different references, any comparative results, and conclusions.

The complex networks of interest could span across several categories (social networks, communication networks, biological networks, web, etc) or be focused on a specific category.

The references should be in the IEEE style.

There should be strictly no copying or plagiarism. You should write the survey paper on your own words and do not directly lift sentences and figures from the papers referenced. Figures could be adapted from the papers referenced, but not directly cut and pasted from the papers.