ELL880 - Social Network Analysis – Fall 2024
Project

Objective & Overview
- One of the main goals of this course is to prepare you to apply state-of-the-art network analysis tools and algorithms to solve a problem. And of course, to look at new or existing problems from a "network" perspective.
- Students can work in teams of up to 3 people. Obviously more will be expected from a 3 member project than a 1 member project
- There can be the following kinds of course projects:
  - Experimental evaluation of algorithms and models on an interesting dataset.
  - A novel network-oriented approach to an existing problem.
  - A theoretical project that considers an algorithm or a network property (measure).
  - A scalable implementation of an algorithm for processing massive graphs.
  - Projects could be a mix of the types of projects outlined above.
  - We expect the project to contain some experimentation on real or synthetic data.

- Projects will be evaluated based on:
  - Significance [5]
    - Did you choose an interesting or a "real" problem or only a small "toy" problem?
    - If it is a "toy" problem, does it show a new way forward?
    - Is this work likely to be useful and/or have impact?
  - Novelty [5]
    - Did the project convey novel insight about the problem and/or algorithms?
  - Technical Depth [8]
    - Does the technical material make sense?
    - Are the proposed algorithms or applications clever and interesting?
  - Results [7]
    - The results achieved during the project
  - Presentations [5]

Project Milestones
- **Project Proposal (5-7 slides)**
  - What is the problem you are solving?
  - What data will you use (how will you get it)?
  - What work do you plan to do the project?
  - What is the success criteria of your project?
  - What do you expect to submit/accomplish by the end of the semester?
  - Literature Survey – All the relevant prior work that has been done.
  - **In-class presentation: September 23, 2024**

- **Final Presentation Structure (20-25 slides)**
  - Introduction/Motivation/Problem Definition
  - Related Work
  - Techniques
  - Results
  - Conclusion and Future Work
  - **In-class presentation: After Finals**