Project Proposal

Project name

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1 Introduction

What is the project

Motivation

2 Related work

2.1 Relationship Inference

Relationship inference in social networks has been studied in various fields and domains. In this context, we refer to friendship inference between pairs of individuals. Representing social networks with topology structures provides insights to predict relationships between individuals based on topology and probability distribution of the links in the topology Liben-Nowell and Kleinberg [2007].

3 Problem formulation

Describe your project as a machine learning problem, identify inputs objects, labels, possible features

4 Data and Evaluation plan

Describe the data you intend to use. Mention if there is an existing data source you intend to use, or if annotation is required

How will you evaluate your algorithm? What is a reasonable baseline?

Submission Instructions:

delete this section when submitting

You are required to use LaTeX to type your solutions to questions, and report of your programing as well. Other formats of submission will **not** be accepted. A template named "homework.tex" is also provided for your convenience.

After logging into data.cs.purdue.edu (physically go to the lab or use ssh remotely, you are all granted the accounts to CS data machines during this class), please follow these steps to submit your assignment:

1. Make a directory named *'your Name_your Surname'* and copy all of your files there.
2. While in the upper level directory (if the files are in /homes/dan/dan_goldwasser, go to/homes/dan), execute the following command:

   `turnin -c cs578 -p PROPOSAL *your_folder_name*`

   (e.g. your prof would use: `turnin -c cs578 -p PROPOSAL dan_goldwasser` to submit his work)

   Keep in mind that old submissions are overwritten with new ones whenever you execute this command.

3. You can verify the contents of your submission by executing the following command:

   `turnin -v -c cs578 -p PROPOSAL`

   Do **not** forget the -v flag here, as otherwise your submission would be replaced with an empty one.

References

David Liben-Nowell and Jon Kleinberg. The link-prediction problem for social networks. 58(7): 1019–1031. ISSN 1532-2882. doi: 10.1002/asi.v58:7. URL http://dx.doi.org/10.1002/asi.v58:7.