RESEARCH OPPORTUNITY: Using social networks to advance the design and functionality of online discussions in Nebula, a Northwestern developed GUI

Course Credit:
Research Practicum registration #: 389 (COMM_ST) or
Independent Study registration #: 399-0 (IEMS)
Duration:
Winter Quarter 2017 (possibly extended to subsequent quarters)
Location:
SONIC Lab, Frances Searle Building 1-459
2240 Campus Dr.
Evanston, IL 60201

Organization Overview:
The Science of Networks in Communities (SONIC) research group advances social network theory and methodology through the development of cutting-edge techniques to understand and enable networks in diverse communities. For more information, please visit
http://sonic.northwestern.edu/about.

Internship Description:
This internship opportunity will be focused on leveraging social network analysis to (a) inform the design of Nebula and (b) examine users' interactions and communication patterns in online group discussions to improve the quality of their discussions.

An intern will employ social network analysis tools to study the social and nonsocial interactions and relationships that develop in Nebula to gain insights into how participants use online group discussions strategically to share information, make decisions, and accomplish their goals and objectives. In addition, there will be the opportunity to design and implement studies to improve the effectiveness with which participants use online discussion forums in group settings. Examples of manipulations include process or structure related interventions and feature enhancements to the discussion tool.

Nebula is a new graphical interface for discussion forums that visualizes online social relationships among users. It is a real-time discussion tool used by participants during their conversations. It conveys the structure of the discussion forum by visualizing posts and comments as nodes, and the relationships between the posts and comments as directed edges that shows the evolving threads or conversations in the discussion. Nebula uses elements of visual design, including color, shapes and typography to enhance usability and aid users in identifying meaningful associations in the discussion. For more information about Nebula, please see
http://sonic.northwestern.edu/grants/nebula/.

Required Qualifications:
This position is open to current undergraduates enrolled in an accredited degree-seeking program at Northwestern. Candidates must be able to demonstrate familiarity with R, Stata or other

statistical software, an interest and familiarity with information visualization techniques, and basic knowledge of linear regression and statistics.

Preferred Qualifications:
Ideal candidates will have a strong interest in research on social systems and be interested in pursuing graduate school. Preference will be given to candidates with familiarity with text analysis, e.g., sentiment analysis and topic modeling and an interest in learning more about virtual teams and communication technologies.

Application Instructions:
Please send a resume and brief cover letter describing your interest in the position to Jacqueline Ng (jacqueline.ng@northwestern.edu) in time for the 2017 Spring Quarter registration on March 31, 2017.