RESEARCH OPPORTUNITY: Analysis of Longitudinal Data from Space Exploration Mission Simulations

Course Credit:
Research Practicum registration #: 389 (COMM_ST) or
Independent Study registration #: 399-0 (IEMS)
Duration:
Spring 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:
An intern will work in a research team that is using datasets from Russian space program and NASA to understand how relationships within a space crew unfold on a scale of years. The goal of this project is to understand how to predict and prevent possible conflicts in the crew that will embark on the first manned mission to Mars. The intern's responsibility will be to carry on analyses to further our understanding of dynamics within crews. Activities will include literature research, data mining, construction of models, and analysis of dynamic networks. The intern will work toward co-authoring a paper for an academic conference or journal.

Required Qualifications:
This position is open to current undergraduates enrolled in an accredited degree-seeking program at Northwestern. Candidates must be able to demonstrate analytic thinking, close attention to detail, and developed communication skills. They should also have a working knowledge of Python or R and mastery of basic statistical concepts and methods (e.g., significance, correlation, and regression).

Preferred Qualifications:
Ideal candidates will have a strong interest in social science research and data analysis and be interested in pursuing graduate school. Candidates with prior experience in research and independent projects in those areas are highly preferred.

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