Social Network and Social Media Analytics in ORA

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Network analytics are widely used in many fields. Increasingly though, the networks of interest are high dimensional. For example, studies of organizations might look at the social network within the organization as well as the task assignment and knowledge network. Studies using Twitter frequently look at the mentions network at the same time as the hashtag network. ORA is a powerful network analysis and visualization tool. ORA supports the assessment of standard social network data, organizational network data, high-dimensional network data, meta-network data, geo-spatial network data, and dynamic network data. This tutorial will cover the basics of using ORA to support social media analytics using high dimensional network analytics and visualization.

Description: A lecture and hands-on workshop in which attendees learn about network science and the ORA toolkit. Using ORA the attendees will learn how to import, export, visualize, and assess data. Attention will be focused on processing Twitter, Blogs and YouTube data. Network analytics for content. Topic group detection. Participants will be presented with a thorough demonstration of software features used to create a sample network and analyze it. Sample data sets will be available.

This session begins with an overview of ORA, and techniques for entering, visualizing, and analyzing social and meta-network (high dimensional) data. Special features for handling node attributes are presented. Key node identification, clustering, spatio-temporal analytics and visualization, social media analytic, and semantic networks are then covered. Special unique features of ORA such as trail visualization, multi-mode network assessment, two mode metrics, JSON importers for Twitter, BlogTracker and YouTube Tracker, and CSV importers will be addressed.

Who Should Attend? Those who are interested in assessing social media data, networks derived from texts, groups, organizations or community interaction using social media data, should attend this 3 hour workshop. The material and its delivery is suitable for researchers and practitioners, alike. This is designed to be a non-technical workshop, however, by its very nature, the material will involve some mathematics, although this will be minimized as the delivery is driven towards forming an understanding of the concepts, not mastery of the details.

Topics Include:

- Social Network Analysis
- Comparing and contrasting networks
- Weighted networks
- Analyzing Social Media data
- Communicative Reach
- Topic Groups
- ORA software
    - Data management, Visualization, General, , Grouping algorithms, Reporting

Computer Equipment:

All attendees will be given a trial version of ORA-PRO and de-identified data sets. In addition, the student version of ORA, ORA-LITE (which is only available for PCs), can be downloaded from here: http://www.casos.cs.cmu.edu/projects/ora/ . The professional version of ORA, ORA-PRO (which is available for the PC or the mac) is available here: http://netanomics.com/ora-pro/ . Participants should bring their own laptops to workshop. The software will be screen-projected to the group as a live walk-through demonstration. Participants will be provided with data through a web link. All participants will also be given a SBP-BRiMS 2019 discount on purchasing a non-trial version of the professional version of ORA which is available for both MAC's and PCs.

Maximum Number of Attendees: Unlimited