

dg.o2005 Tutorial: Application of Social Network Analysis in Digital Government Research

Presenters:

David Lazer, Ines Mergel Kennedy School of Government, Harvard University

<u>Noshir Contractor</u> <u>University of Illinois at Urbana-Champaign</u>

Tutorial home page

Scheduled: 2 p.m. to 5 p.m., Sunday, May 15 | REGISTER NOW

Description:

Social network analysis is a developing paradigm in academia, business and also in private lives. It spins across all kinds of academic disciplines, such as sociology, anthropology, psychology,

International Workshops Workshops confirmed to date:

(Sunday, May 15) Digital Government Integration & Systems Evaluation

E-Authentication Infrastructures and their Interoperability: a corner-stone for the third millennium society

dg.o2005 Tutorials

Tutorials offered, subject to advance registration:

(Sunday, May 15) Application of Social Network Analysis in Digital Government Research

(Wednesday, May 18) Data Confidentiality and Statistical Disclosure Limitation

organization studies or political sciences. It helps to map and measure of relationships and communication or resource flows between people, groups, organizations, computers or other entities. The nodes in the network are the people and groups while the links show relationships or flows between the nodes. Social networks are formed of social relations that consist of nodes (represented by actors, players, agents, vertices or points) and are connected by lines (ties, links or edges). The nodes can either consists of individuals or collectivities, such as organizations, political units (cities, nations, or societies). Social network analysis provides both concepts and theories, but also statistical tools to visualize and analyze the observed relationships.

Goal:

The target audience of the tutorial "Application of Social Network Analysis in Digital Government Research" is any researcher interested in the theory and analysis of relationships between computer networks, organizational and institutional actors. This tutorial is intended to give an overview of the existing theories, a brief introduction into the analysis of network data using a common tool called UCInet and into different visualization methods. Moreover, specific applications for digital government researchers are presented. A Q&A session will end the tutorial, in which researchers can address their specific research needs.

We will use existing, well-known and often reanalyzed data to show the relevance of social network analysis in different fields of application. In addition, we will use our own data from

different studies in the area of Digital Government to show the relevance of the method and enhance the understanding of social network analysis. After this tutorial, attendees will be able to analyze their own data using social network analysis techniques. The lecturers will submit a list of introductory readings and Internet resources on Social Network Theory and Analysis.

Outline:

- 2:00-3:00 p.m.: Introduction to Social Network Theory
- 3:00-4:00 p.m.: Introduction to Social Network Analysis using UCInet & Network Visualization Methods
- 4:00-5:00 p.m.: <u>Applying Social Network Techniques in Digital Government Research</u> (Examples of projects and Q&A)

Brief bios:

David Lazer is an Associate Professor of Public Policy at the Kennedy School of Government, Harvard University and teaches classes on Social Network Analysis. David is the Associate Director and Co-Principal Investigator of the National Center for Digital Government, a NSF funded research center. He runs the Cambridge Colloquium on Social Networks and Complexity (see http://www.ksg.harvard.edu/complexity).

For more information about David see: <u>http://ksgfaculty.harvard.edu/David_Lazer</u>

Contact:

David Lazer Associate Professor of Public Policy Kennedy School of Government Harvard University 79 JF Kennedy Street, T371 Cambridge, MA 02138 Phone: 617-496 0102 Email: david_lazer@harvard.edu

Ines Mergel is a Postdoctoral Fellow at the National Center for Digital Government that is located at the Kennedy School of Government, Harvard University. She has recently finished her dissertation with the title: "The influence of multiplex network ties on the diffusion of eLearning techniques "A social network analysis". She holds a PhD from the University of St. Gallen, Institute of Management, in Switzerland. In her research she focuses on the social network relationships in the diffusion of innovative technologies from a Social Sciences perspective.

Ines will be responsible for the second part of the tutorial and will give an introduction on Social Network Analysis techniques and different kinds of visualization techniques. For more information, resume, and a list of publications see: <u>http://www.ksg.harvard.edu/digitalcenter/people/mergel_bio.htm</u>

Contact:

Ines Mergel Kennedy School of Government

Harvard University

79 JF Kennedy Street, T371 Cambridge, MA 02138 Phone: 617-496 611 Email: <u>ines_mergel@harvard.edu</u>

Noshir Contractor (www.uiuc.edu/ph/www/nosh) is a professor of speech communication and Director of the <u>Science of Networks in Communities (SONIC)</u> Group at the National Center for Supercomputing Applications at the <u>University of Illinois at Urbana-Champaign</u>. His research program, funded continuously for the past decade by NSF, is investigating factors that lead to formation, maintenance, and dissolution of dynamically linked knowledge networks in 21st century organizational forms. His book titled "Theories of Communication Networks" (co-authored with Professor Peter Monge and published by Oxford University Press) received the 2003 Book of the Year award from the Organizational Communication Division of the National Communication.

Contact :

Noshir Contractor University of Illinois at Urbana-Champaign 244 Lincoln Hall 702 S. Wright Street Urbana IL 61801 217-333-7780 nosh@uiuc.edu

See this page from DG.O 2005: <u>http://dgrc.org/dgo2005/program/tutorials/lazermergel_wrapped.jsp</u>