ADT Project

The Agribusiness Development Teams (ADT) Mission project is a collaborative effort of the Network Science Center at West Point and the National Guard Bureau’s ADT Mission. The project was initially created to improve the collection, management and sharing of data and information on ADT development projects and missions and to conduct research leading to an improved model for success of ADT missions operating in Afghanistan. To achieve these goals, the ADT Mission project is involved in the development of two DARPA-funded technologies:

- CERP Project Planning Tool: The Commander’s Emergency Response Program (CERP) Project Planning software program will make it possible for ADT personnel to load project planning information on a handheld device while in the field.
- AAR Knowledge Management Tool: An After-Action Review (AAR) technology created under a previous DARPA project is now being modified for use by ADTs. Working with military units currently engaged in economic development efforts, the ADT Mission project is using lessons learned from these missions to develop a more successful model for the execution of future missions. A critical part of this model is a strategy for sharing information with civilian aid organizations. This requires better coordination from the start of the missions so that work done by military units lays the foundation for later civilian efforts. ADT field teams have collected information and the project is now working to make the data publicly accessible and searchable.

Researchers from Center for Computational Analysis of Social and Organizational Systems (CASOS) at Carnegie Mellon University were at West Point last week to present a workshop on ORA, a network analysis and visualization software. Dr. Kathleen Carley, the director of CASOS, opened the workshop with an introduction to Social and Dynamic Network Analysis including SNA metrics, meta-network representations, grouping and a discussion of how to cope with missing data. LTC Micheal Lanham and Kenny Joseph, two PhD students at CMU provided further instruction on ORA capabilities including visualizations, reports, Geo-spatial Network Analysis, and text mining tools such as AutoMap and CEMAP. The workshop which ran September 21 – 23 provided 18 researchers at West Point an opportunity to learn how to more fully use the all the capabilities provided in this software package including different kinds of output the program offers and also D2M, a streamlined approach to data processing that minimizes replication of effort. During the last day attendees were able to use the program with their own data to create network pictures, time trails and reports.

For more information on ORA, AutoMap, or CEMAP see the CASOS website: http://www.casos.cs.cmu.edu/index.php

To learn more about the ADT Project go to their website.
The NSC has launched the Central Node to provide researchers and practitioners with an online gathering place to share ideas and news. It also serves as a link through which everyone with an interest in network science can keep track of the activities of NSC researchers and staff in real time. Check it out and contribute at http://blog.netsciwestpoint.org/.

About the Network Science Center

The Network Science Center (NSC) brings together service members, civilians, and cadets to research and develop significant contributions in the study of network representations of physical, biological, and social phenomena leading to predictive models. The NSC is a thought-leader in this emerging discipline and addresses Army-specific and related Network Science challenges. The NSC also provides relevant educational opportunities for current and future Army leaders.

The NSC is inherently interdisciplinary, leveraging a wide range of USMA academic departments, research centers, and disciplinary experts with close ties to military and civilian research centers. This interdisciplinary capability is critical, given the nature of networks which are pervasive across all aspects of life: biological, physical, and social. The unique ability of the Military Academy within the Army to bring these disciplines together provides an opportunity for significant contributions to the defense of the United States against both conventional military threats and the threat of terrorism.

Important Dates:

Registration for 6th Annual Network Science Workshop - Oct. 15
Application deadline for Minerva positions - Oct. 15
Upcoming Brown bag lunches - Oct. 5 and Oct. 19

Current Publications:

Current articles are on NSC website under Publications or linked below:

- Adversarial Geospatial Abduction Problems
- AutoMap Introduction Version 1.0
- Data Collection Challenges: Lessons Learned from the Czech Capital