



**RVAC**  
Regional Visualization  
and Analytics Centers

North-East Visualization  
and Analytics Center

[www.geovista.psu.edu/NEVAC](http://www.geovista.psu.edu/NEVAC)



# Third Annual DHS University Network Summit Student Day

March 16, 2009

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## Center of Excellence

National Visualization and Analytics Center  
Pacific Northwest National Laboratory

Regional Visualization and Analytics Centers  
North-East Visualization and Analytics Center  
Pennsylvania State University GeoVISTA Center  
Penn State Department of Geography  
Penn State College of IST  
Drexel University College of IST

Principle Investigators Include: Alan MacEachren, Chaomei Chen,  
Prasenjit Mitra, Michael McNeese



## About Don Pellegrino

Second year Information Studies PhD student, currently working on proposal for dissertation work.

### Research Topics:

Visual Analytics; Information Visualization

Heterogeneous Data Analysis; Group Cognition



## COE / DHS Experiences

March 2008: DHS Summit best poster award for “Automated Hypothesis Generation and Evaluation by Network Structure Content Analysis and Visualization.”

May 2008: Served as a Special Awards Judge for DHS at the Intel International Science and Engineering Fair.

May 2008: NVAC Spring Consortium Meeting at Johns Hopkins Applied Physics Laboratory

July 2008: Visual Analytics Educational Workshop at Pacific Northwest National Laboratory



## COE / DHS Experiences

October 2008: Presented on Visual Analytics locally at “Preparedness in the Region: Confronting Vulnerability in the Delaware Valley” sponsored by Drexel's Engineering Cities Initiative and the City of Philadelphia Managing Director's Office of Emergency Management

October 2008: NEVAC team won “Grand Challenge Award: Data Integration” in the IEEE Visual Analytics Science & Technology Challenge.

December 2008: Mark H. Weir and Jade Mitchell-Blackwood hold a meeting of the Homeland Security Philadelphia Student Chapter at Drexel University.



## Theme I: Multi-disciplinary Opportunities

**Information Science:** Penn State, Drexel (NEVAC)

**Geography:** Penn State GeoVISTA Center (NEVAC)

**Biology, Environmental Engineering:** Center for Advancing Microbial Risk Assessment (CAMRA COE @ Drexel)

**History:** Drexel Engineering Cities Initiative (Drexel)



## Theme 2: Local & National Opportunities

**National:** Pacific Northwest National Laboratory

**Local:** Drexel Engineering Cities Initiative, Homeland Security Philadelphia Student Chapter (Mark H. Weir, Jade Mitchell-Blackwood).



## Theme 3: Pasteur's Quadrant

[ Stokes, Donald E., “Pasteur's Quadrant: Basic Science and Technological Innovation,” Brookings Institution Press, 1997. ]

The Centers of Excellence have created an incredible environment that combines issues of national need with networks of outstanding researchers. Students can take advantage of this environment to work on “use-inspired basic research” that leads to fundamental understanding and is inspired by societal needs.





## Advice:

**People:** Transformative research can occur by bridging disciplines. Build your social capital by meeting people here.

**Problems:** DHS has exciting and important problems. Try to solve them.