Reconnect Conference 2009

*Reconnecting Teaching Faculty to the Mathematical Sciences Enterprise and
Exposing Researchers in Government and Industry to Relevant Current Research*

Visual Analytics and its Applications

Principal Speakers: **Georges Grinstein**, University of Massachusetts Lowell, grinstein@cs.uml.edu
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Dates: August 9 – 15, 2009 (Sunday evening through Saturday afternoon)

About the Reconnect Conference: The Summer Reconnect Conferences expose faculty teaching undergraduates to the role of the mathematical sciences in homeland security by introducing them to a current research topic that will be relevant for classroom presentation. The conferences also offer researchers in government or industry the opportunity to learn about recent techniques in emerging application areas relevant to homeland security. Participants will also acquire materials and gain ideas for seminar presentations and for undergraduate research projects and have the opportunity to network with people from a variety of backgrounds.

Definition: Visual Analytics is an emerging field that integrates visualization with data analysis to facilitate analytical reasoning. It envisions a discovery process in which humans, algorithms and visualizations interact to solve problems.

Description: This Reconnect conference will introduce participants to basic concepts in visual analytics. Program participants will gain an understanding of how the various components of visual analytics (human, algorithmic, and visualization) can work together to solve large and complex real-world problems in such areas as homeland security and bioinformatics. Each participant will use a variety of algorithms and visualizations; each will work with realistic data sets; and each will write briefs as to how they solved specific problems. There will be a number of video lectures and assigned readings as well as hands on use of several commercial and open source tools.

Conference Organizer: Fred S. Roberts, Rutgers University (froberts@dimacs.rutgers.edu)

Where: Sessions will be held at the DyDAn Center, located at Rutgers University in Piscataway, NJ.

Registration Fees, Lodging, Meals and Travel:
- Academic participants: Lodging and meals will be provided through DHS funding. Limited funds are expected to be available for travel awards. There are no registration fees.
- Applicants from government and for-profit corporations are asked to provide their own travel and lodging, plus registration fees* (that cover all meals from Sunday dinner to Saturday lunch) as follows:
    - Government Lab participants: $350.
    - Corporate participants: $500.

    *Funds may be available to waive part or all of the registration fee and/or partially support travel and lodging.

Who May Apply?
Anyone may apply. Preference will be given to faculty whose primary job is undergraduate teaching and those working at government labs. Two-year college faculty are welcome to apply. Faculty from groups under-represented in mathematics are also encouraged to apply. Applications will be accepted until all positions are filled.

To receive more information, visit our web site at http://dydan.rutgers.edu/Education/reconnect/2009/. Or, contact the Reconnect Program Coordinator, at reconnect@dimacs.rutgers.edu, or telephone at (732) 445-4304.