

Beyond the Homeland

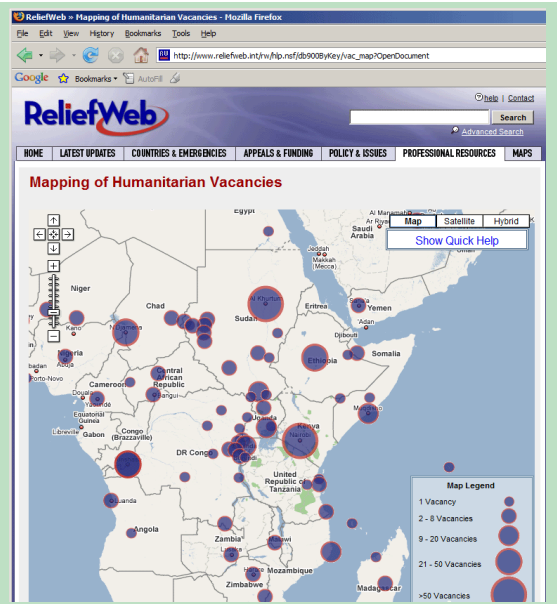
Benefit: The outreach of open-source Geovisual Analytic technologies to humanitarian information practitioners can allow for the application of Geovisual Analytics to complex, international crisis situations. Ideally, improving the lives of people effected by crisis around the world will diminish motivations to attack the US homeland, and position Visual Analytics research in general to address current international problems such as global warming, food security, and infectious diseases that create indirect homeland threats.

Outreach of open-source Geovisual Analytic Technologies to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) ReliefWeb group

Today's increasingly interconnected world coupled with a modern hazard-scape, derived in part from items such as climate change, increased population densities, societal over-dependence on computing technology, violent conflicts, and terrorism, is creating an environment where disasters increasingly cross international borders, and where the global community responds to those disasters and makes long-term commitments to recovery. International disaster response and recovery is increasingly being coordinated through ReliefWeb (<http://www.reliefweb.int>), a sub-organization with the United Nation's Office for the Coordination of Humanitarian Affairs (OCHA). Since it is part of OCHA, the primary mission of ReliefWeb is to serve an information management coordination role through the collection, maintenance, and dissemination of humanitarian information to the humanitarian community. As the world's central repository for vast amounts of heterogeneous humanitarian information, ReliefWeb represents an important and unique group that can benefit from the applied use of geovisual analytic technologies.

In 2008, NEVAC-alumni Dr. Brian Tomaszewski worked with ReliefWeb to incorporate select open-source geovisual analytic technologies he developed for use on the ReliefWeb site. In particular, Dr. Tomaszewski developed a humanitarian vacancies mapping application, which automatically creates map symbols by geocoding an RSS feed of humanitarian vacancies published by ReliefWeb. The geocoder used in this application is an open-source geographic information retrieval algorithm developed by Tomaszewski as part of other NEVAC geovisual analytic research on supporting situation assessment and reasoning with text documents. The application represents a small, but an important, first step toward the use of geovisual analytics in homeland security threats that can be addressed through the general improvement of the lives of destitute people around the world.

The humanitarian vacancies mapping application : Each map symbol represents where jobs in the humanitarian sector are located. Symbol size represents the number of vacancies at a location . The web application supports quick filtering of information retrieved.



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Early Development

Lab Prototype

Commercial Product

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