Welcome!

Visualization and modeling using geospatial disaster response products

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Overview

• The RIT Science Master’s Program (SMP)

• Spatial Modeling and Visualization Course

• Student Group Projects

• Educational Benefits and Outcomes to date

• Summary and Conclusions
RIT Science Master’s Program (SMP)

- Six student cohort
  - Imaging Science, Computer Science, Environmental Science
- STEM Workforce - disaster response
- Interdisciplinary Projects

http://www.cis.rit.edu/EnvironmentalForecasting
Spatial Modeling and Visualization Course
Major Course Topics

Understanding of GIS data models and spatial models

Development of proficiency using desktop GIS software modeling tools

Skill development in spatial analysis techniques applied to spatial modeling

Understanding of geographic visualization and representation principles and techniques

Understanding of how GIS modeling and visualization techniques are applied to disaster management
ArcGIS Model Builder
Student Group Projects

1. Social vulnerability model (Spring 2011)

2. Text processing model for automated disaster area identification (Fall 2011)
Text processing model for automated disaster area identification (Fall 2011)
Educational Benefits and Scholarly Outcomes to Date

• Student-led Publication

• International Conference Presentations

• Disaster Management and GIS Internships
Student-led Publication

ArcUser - Major GIS trade magazine (Jan 2012)

2012 International Conference on Information Systems for Crisis Response and Management (ISCRAM)

Student presented research in international conference

Has given student additional insights into research and broader disaster management issues
Disaster Management and GIS Internships

Paid internship with USGS in Golden, CO
Developing tools to track social media responses to earthquakes

Paid internship with Esri in Redlands, CA
Developing Android-platform spatial applications
Summary and Conclusions

• Students developed awareness of multi-scale disaster management issues (local to global)

• Synergy from interdisciplinary cohorts - sharing of ideas, skills and perspectives

• Spatial thinking development via focus on GIS tool use

• Professional development via scholarship and internships
Questions/Comments:

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Thank you!