Heng Cai

Ph.D Candidate
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Major Areas of Research Interests

GIS, spatial analysis and modeling, community resilience, coupled natural-human system, disaster risk analysis

Education

Ph.D. (2013 – 2017 (expected)), Environmental Science, Louisiana State University, USA

M.S. (2010 - 2013), Cartography and Geographic Information System, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing, China.

B.E. (2006 - 2010), Surveying and Mapping Engineering, China University of Geosciences, Beijing, China

Publications

Cai H, Lam NSN, Zou L, Qiang Y, Li K. 2016. Assessing Community Resilience to Coastal Hazards in the Lower Mississippi River Basin. *Water*. 8(2):46.

Zou L, Kent J, Lam NSN, **Cai H**, Qiang Y, Li K. 2016. Evaluating Land Subsidence Rates and Their Implications for Land Loss in the Lower Mississippi River Basin. *Water*. 8(1):10.

Li K, Lam NSN, Qiang Y, Zou L, **Cai H**. 2015. A Cyberinfrastructure for Community Resilience Assessment and Visualization. *Cartographic and Geographic Information Science* 42:sup1, 34-39, DOI: 10.1080/15230406.2015.1060113.

Luo L, Wang X, **Cai H**. 2014. An integrated 3S and historical materials analysis of the Keriya Paleoriver, NW China. *IOP Conference Series: Earth &Environmental Science* 17(1):012165.

Cai H, Wang J, Yang R, Ji W, Wang X. 2013. Analysis of spatial-temporal change of Qiemo oasis vegetation coverage based on FCD model. *Remote Sensing for Land & Resources*. 25(2):131-137. (In Chinese with English abstract)

Luo L, Mu L, Wang X, Li C, Ji W, Zhao J, **Cai H**. 2013. Global detection of large lunar craters based on the CE-1 digital elevation model. *Frontiers of Earth Science*. 7(4): 456-464.

Luo L, Wang X, **Cai H**, Li C, Ji W. 2012. Mapping a paleodrainage system of the Keriya River using remote sensing data and historical materials. *Journal of Earth Science and Engineering*. 2:712-721.

Presentations

Cai H. 2016. Assessing Community Resilience to Coastal Hazards in the Lower Mississippi River Basin. The College of the Coast and Environment 8th Annual Graduate Student Symposium, April 21, Baton Rouge, LA. (Finalist, oral)

2/16/2017

Cai H, Lam NSN, Zou L, Qiang Y, Li K. 2016. Assessing Community Resilience to Coastal Hazards in the Lower Mississippi River Basin. 2016 Annual Meeting of Association of American Geographers (AAG), March 29, San Francisco, CA. (Oral)

Cai H, Lam NSN, Zou L, Qiang Y, Li K. 2015. Assessing the dynamics of coastal resilience using Bayesian Networks. 2015 Annual Meeting of Association of American Geographers (AAG), April 25, Chicago, IL. (Oral)

Cai H, Lam NSN, Zou L. 2014. Predicting the resiliency of the East Coast counties after Hurricane Sandy. The 30th Louisiana Remote Sensing and GIS Workshop, May 12, New Orleans, LA. (Poster)

Cai H, Lam NSN, Zou L. 2014. Predicting the resiliency of the east coast counties after Hurricane Sandy. 2014 Annual Meeting of the Association of American Geographers, April 9, Tampa, FL. (Oral)

Cai H, Wang X, Luo L, Li C. 2013. Mapping a paleoriver system of Qarqan River based on multi-source data. 35th International Symposium on Remote Sensing of Environment (ISRSE35), April 22-26, Beijing, China. (Oral)

Cai H, Wang X, Xiang B, Wang J. 2012. Analysis of spatial-temporal changes of vegetation coverage in Qiemo oasis. International Symposium on Earth Observation for Arid and Semi-arid Environments, September 18-21, Kashgar, China. (Oral)

Honors and Awards

2017   International Cartography Association (ICA) travel fund for the 28th International Cartographic Conference in Washington, DC, July 2-7, 2017.

2017   AAG the Hazards, Risk, and Disasters Specialty Group's Jeanne X. Kasperson Award.

2015, 2016   Graduate Student Travel Fund, the Graduate School, Louisiana State University.

2014   Graduate Student Travel Fund, the Graduate School, Louisiana State University.

2009   Excellent Student Cadre of China University of Geosciences, Beijing, China.

2008, 2009   University Excellent Student Scholarship, China University of Geosciences, Beijing, China.

Membership in Professional Organizations:

Association of American Geographers (AAG)

The International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)

Invited Reviews:

Sustainability; Journal of Geography, Environment and Earth Science International; the 2016 International Conference on Water Resource and Environment;