

Curriculum Vitae

Chunling Liu

Adjunct Faculty, PhD
HCCS Southwest College,
Houston, TX 77081
Tel.: 713.718.6776 (Leave a message)
Email: chunling.liu@hccs.edu

EDUCATION

Ph.D. in Geography, Graduate School of Geography, Clark University, 2009
Dissertation: *Exploring Temporal Dimensions of Vulnerability: Farmers' Coping Response to water scarcity in the Lower Yellow River*
Faculty advisor: Professor Roger Kasperson
M.A. in Geography, Graduate School of Geography, Clark University, 2002
M.S. in Environmental Sciences, Peking University, China, 1998
B.S. in Geography (minor in GIS), Peking University, 1995

DIPLOMA

Certificate of Achievement in Vulnerability Analysis Workshop, 2004
International Institute for Applied Systems Analysis (IIASA), Vienna, Austria
Advanced Institute on Vulnerability to Global Environmental Change, Co-sponsored by START (Global Change SysTem for Analysis, Research & Training, partner of IHDP.IGBP.WCRP) and IIASA

AREAS OF SPECIALIZATION

GIS map making, data analysis and web application
Remote sensing and digital image processing
Human-Environment relationships and environmental hazards
Flood hazards and water resource management
Global environmental change and vulnerability assessment

PROFESSIONAL EXPERIENCE

October 2012 – present, GIS supervisor
Public Utility Division, Department of Public Works and Engineering
City of Houston, Houston, TX
Leading a GIS analysis and web application team, building a GIS utility training program using the customized ArcGIS software ArcFM, managing and maintaining citywide water utility geodatabase, developing web-based GIS applications including map viewers and mobile functionalities using ArcGIS API technology

May 2010 – present, member, North Houston Arc User Group

The Woodlands, TX

Attending user conferences and ESRI training sessions regularly

June 2008 – May 2011, GIS Specialist

Water Resources Department (FEMA Flood Mapping Project)

Michael Baker Jr., Inc., Houston, TX

Led GIS work in FEMA (Federal Emergency Management Agency) five-year DFIRM (Digital Flood Insurance Rate Map) Map Modernization Projects for ten Texas counties using the whole suite of ArcGIS softwares (including creating technical guidelines, reviewing and finalizing hydrological models and map products, maintaining geodatabase, processing satellite and LiDAR imagery, updating FEMA national GIS services using web-based applications); provided all-round GIS support and held GIS training sections regularly

Sept. 2007 - May 2008, Adjunct Faculty

Department of Geography and Geology, Sam Houston State University, TX

Taught introductory level geography classes

Jan. 1999 - May 2005, Research Associate

Clark Labs for Cartographic Technologies and Geographic Analysis, Clark University

George Perkins Marsh Institute, Clark University

- *Provided GIS technical support, designed software testing routines, wrote product documentation and workbooks, conducted **GIS user training** workshop on a regular basis and represented Clark Labs at AAG and ASPRS conferences for GIS workshops*
- *Participated in designing and maintaining the Clark University web page using HTML*
- *Digitized paper maps, built spatial database, developed spatial models, wrote newsletters and prepared final reports for a **National Institutes of Health** project: Nuclear Risk Management for Native Communities – Community-based Fallout Exposure Assessment Program*
- *Compiled and processed satellite imagery from a variety of sources, and conducted image analysis and spatial analysis, and produced land use/cover maps for a **United Nations Environment Programme** project: Satellite Monitoring and Assessment of El Nino and La Nina Impacts Over Eastern and Southern Africa--Towards Developing an Early Warning System*

Oct. 2002 - May 2003, Visiting Scholar

Institute of Environmental Engineering, Peking University, China

Organized and lectured in the Sustainable Water Resource Management Workshop

Feb. 1996 - May 1998, Research Assistant

UNEP- CHINA Cooperation Project for Global Environmental Outlook

Center for Environmental Sciences, Peking University, China

Organized focus group meeting and wrote work reports

AWARDS, GRANTS AND HONORS

Travel Award, Advanced Institute of Vulnerability to Global Environmental Change, START (Global Change SysTem for Analysis, Research & Training), 2006

START (Global Change SysTem for Analysis, Research & Training) **International Research Grant** (Vulnerability to Global Environmental Change Program), *Farmers' Vulnerability to the Yellow River's Desiccation*, 2004-2005, \$10,000

Doctoral Dissertation Research Improvement Award, BCS-0221144, **National Science Foundation**, *A Dynamic Approach to the Assessment of Vulnerability: Farmers' Coping Response to the No-Flow Events in the Lower Yellow River*, 2002 –2003, \$11,960

Jeanne Kasperson Student Paper Competition Award, Association of American Geographers (AAG) Hazard Specialty Group, 2005

Visiting Scholar Fieldwork Grant, Yucheng Experimental Station, **Chinese Academy of Science**, China, 2003

Full Graduate Scholarship, Clark University, 1998-2004

Visiting Scholar Travel Award, Institute of Environmental Engineering, Peking University, China, 2001

Pruzer-Holzhauser Fellowship for Graduate Research, Clark University, 2001

Student Travel Award, Society for Risk Analysis Annual Meeting, Washington, DC, 2000

Guanghua Graduate Fellowship, Peking University, China, 1996-1998

PUBLICATIONS

Liu, C. and G. Gong, 2015. Assessing Vulnerability to Hurricanes in Harris County, Texas. In G.A. Tobin & B.E. Montz (eds.) Evolving Approaches to Understanding Natural Hazards. Cambridge Scholars Publishing: Newcastle-Upon-Tyne.

Liu, C. and G. Gong. 2011. Assessing vulnerability to Hurricanes in Harris County, TX, 2011. *Papers of the Applied Geography Conferences*, 34: 175-183.

Liu, C., D. Golding and G. Gong, 2008. Farmers' coping response to the low-flows in the Lower Yellow River: A case study of temporal dimensions of vulnerability. *Global Environmental Change* 18: 543-553.

Acosta-Michlik, L., **C. Liu** and U. Kelkar, 2007. Differential vulnerability to climate change in Asia and the challenges for adaptation within the Kyoto context. In Grover, Velma (ed.) *Climate Change, Kyoto: ten years still counting?* Science Publishers, Enfield, NH.

Russ, A., P. George, R. Goble, S. Crema, **C. Liu**, D. Sanchez, 2005. Native American exposure to Iodine-131 from nuclear weapons testing in Nevada. *Human and Ecological Risk Assessment* 11 (5): 1047-63.

Liu, C. 2004. Farmers' vulnerability to low-flows in the Lower Yellow River. *Proceedings of Advanced Institute on Vulnerability to Global Environmental Change*.

Liu, C. and S. Crema, 2002. Nuclear risk management for native communities project (NRMNC): GIS and community-based hazard management. *Newsletter of the Community-Based Hazard Management Program*.

Eastman, R., A. Anyamba, Y. Li, C. Mitchell, H. Chen, **C. Liu**, G. Han, M. Syfert, 2001. Spatial variation of ENSO events in east and southern Africa: implications and methodology for predictive forecasting. *Project report to UNEP*.

Liu, C. and S. Luan, 1998. China's statement of environment and Review of current environmental policy responses in China, *work reports for UNEP Global Environmental Outlook*.

Liu, C., 1997. A review of environmental administrative enforcement system in China. *Herald of Environment* 3: 7-9.

PROFESSIONAL PRESENTATIONS

Introduction to GIS workshop, Public Utility Division Student Summer Camp, City of Houston. Waterworks Education Center, Houston, TX. June 2015.

GIS utility map workshop, Harris County GIS Day. Lone Star- Cyfair Campus, Spring, TX, Nov 2012.

Liu, C., and W. Feng. Developing vulnerability indices for evacuation assistance needs in Harris County, TX. Texas Floodplain Management Association Annual Conference. Fort Worth, TX, June 2010.

Liu, C. Developing a vulnerability composite map to natural hazards in Harris County, TX. American Society of Civil Engineering -Texas Regional meeting. The woodlands, TX, October 2009.

Liu, C. Farmers' vulnerability to the Yellow River's Low-flows: a case study of temporal dynamics of vulnerability in Ma Village, Binzhou. The 101st Annual Meeting of the Association of American Geographers (AAG), Denver, April 2005.

Liu, C. Response of water management institutions to the dry-up of the lower Yellow River. The 100th Annual Meeting of the Association of American Geographers (AAG), Philadelphia, March 2004.

Liu, C. Institutional issues in basin water resource management in China. Sustainable Water Resource Management Workshop, Peking University, China, January 2003.

Liu, C., R. Kasperson, J. Ni. Farmers' vulnerability to water shortage problem from the Yellow River's no-flow events. The 98th Annual Meeting of the Association of American Geographers (AAG), Los Angeles, March 2002.

GIS Demo and training. The 97th, 98th, 100th Annual Meeting of the Association of American Geographers (AAG), 2001, 2002, and 2004.

GIS Demo and training. Annual meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), Washington DC, 2002.

Liu, C. Vulnerability to global climate change: a case of Yellow River's no-flow events. Invited lecture by Yellow River Conservancy Commission, Zhengzhou, China, May 2001.

Liu, C. Environmental challenges to facility siting in China. Annual Meeting of the Society for Risk Analysis, Washington DC, 2000.

SKILLS

Languages: native speaker of Mandarin and Cantonese

GIS/Image processing: ArcGIS, Erdas, IDRISI, CartaLinx, ENVI

Statistics/Mathematics: SPSS, SAS

Engineering: MicroStation; AutoCAD

Scripting language: C++, VBA, HTML, Python, Adobe Flex, JavaScript, Silverlight

General software: Microsoft Office Suite

REFERENCES

Professor Roger E. Kasperson
Research Professor and Distinguished Scientist
George Perkins Marsh Institute, Clark University
950 Main Street, Worcester, MA 01610
Phone: (508) 751.4607
Fax: (508) 751.4600
E-mail: rkasperson@clarku.edu

Professor Honglei Zhu
Clark Labs for Cartographic Technologies and Geographic Analysis
Graduate School of Geography, Clark University
950 Main Street, Worcester, MA 01610
Phone: (774) 287.7976
Fax: (508) 793.8842
E-mail: hzh@clarku.edu

Professor Dominic Golding
Interdisciplinary and Global Studies Division
Worcester Polytechnic Institute (WPI)
100 Institute Road, Worcester, MA 01609
Phone: (508) 831.6463
Fax: (508) 831.5485
E-mail: golding@wpi.edu