

## YAO LI

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### EDUCATION

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Ph.D. 2020 (expected)	Water Resources Engineering, Zachry Department of Civil Engineering, Texas A&M University
Ph.D. 2017	Cartography and GIS, Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences (CAS)
B.S. 2012	GIS, College of Information Engineering, China University of Geosciences, Beijing (CUGB)

### RESEARCH EXPERIENCE

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2016 – Present	Research Assistant, Texas A&M University
2012 – 2016	Research Assistant, RADI, Chinese Academy of Sciences

### RESEARCH INTERESTS

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Hydrological remote sensing: use multi-source satellites generate global lake bathymetry and monitor reservoir storage.

Ocean color: retrieve chlorophyll-a concentration and investigate its response to various environmental stress.

### AWARDS & HONORS

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2016-2018	Graduate Travel Fund Award, CVEN, Texas A&M University (3 times)
2014	Distinguished Contribution Award, Hyperspectral Remote Sensing Lab, RADI, CAS.
2012	Outstanding Graduate of Beijing, Beijing Municipal Education Commission (Top 1%)
2012	Outstanding Graduate, China University of Geosciences, Beijing (Top 5%)
2011	Award of Excellent Student, China University of Geosciences, Beijing (Top 5%)
2010	National Third-Class Award of Mathematical Modeling, Chinese Society of Electrical Engineering
2009	National Scholarship, Ministry of Education of the People's Republic of China (Top 1%)
2009-2011	First-Class Scholarship, China University of Geosciences, Beijing (Top 3%, 4 times)

### PUBLICATIONS

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**Yao Li**, Huilin. Gao, Michael F. Jasinski, Shuai. Zhang, and Jeremy D. Stoll (2019), Toward Mapping High-Resolution Global Lake Bathymetry using 532 nm Photoncounting Lidar, IEEE Transactions on Geoscience and Remote Sensing, in review.

**Yao Li**, Chuanmin Hu, Antonietta Quigg, Huilin Gao (2019), Potential influence of the Deepwater Horizon oil spill on primary production in the northern Gulf of Mexico, Environmental Research Letters, in review.

**Yao Li**, Huilin Gao, Gang Zhao (2019), A high-resolution bathymetry database for global reservoirs using multi-source satellite imagery and altimetry, Remote Sensing of Environment, to be

submitted.

- Chao Ding, Xiangnan Liu, Fang Huang, **Yao Li**, Xinyu Zou (2017), Onset of drying and dormancy in relation to water dynamics of semi-arid grasslands from MODIS NDWI, *Agricultural and Forest Meteorology*, 234, 22-30.
- Yao Li**, Lifu Zhang, Changping Huang, Jinnian Wang, Yi Cen (2016), Monitor of Cyanobacteria Bloom in Lake Taihu from 2001 to 2013 Based on MODIS Temporal Spectral Data. *Spectroscopy and Spectral Analysis*, 36(5), 1406-1411.
- Xueke Li, Taixia Wu, Kai Liu, **Yao Li**, Lifu Zhang (2016), Evaluation of the Chinese fine spatial resolution hyperspectral satellite TianGong-1 in urban land-cover classification, *Remote Sensing*, 8(5), 438.
- Guibin Hao, Bo Wu, Lifu Zhang, Dongjie Fu, **Yao Li** (2016), Temporal and spatial variation analysis of the area of Siling Co in Tibet based on ESTARFM(1976-2014). *Journal of Geo-Information Science*, 18 (6), 833-846.
- Chao Ding, Xiangnan Liu, Wencan, Meiling Liu, **Yao Li** (2014), Mafic-ultramafic and quartz-rich rock indices deduced from ASTER thermal infrared data using a linear approximation to the Planck function. *Ore Geology Reviews*, 60, 161-173.
- Kai Liu, Lifu Zhang, Hang Yang, Haitao Zhu, Hailing Jiang, **Yao Li** (2013), Hyperspectral Unstructured Background Target Detection Approach Based on Object-Oriented Analysis. *Spectroscopy and Spectral Analysis*, 33, 1653-165

## PRESENTATIONS

- Yao Li**, Chuanmin Hu, Antonietta Quigg, Huilin Gao (2019), Influence of the Deepwater Horizon oil spill on primary production in the northern Gulf of Mexico, *Gulf of Mexico Oil Spill & Ecosystem Science Conference*.
- Yao Li**, Huilin Gao, Michael Jasinski, Shuai Zhang, and Jeremy Stoll (2018), Towards High-Resolution Lake Bathymetry: an Algorithm tested using Data Collected by the ICESat-2 Airborne Simulator over Lake Mead, *AGU Fall Meeting*.
- Yao Li**, Huilin Gao, Adam Skarke (2018), Chlorophyll-a Variations on the Northern US Atlantic Margin, *Gulf of Mexico Oil Spill & Ecosystem Science Conference*.
- Yao Li**, Huilin Gao, Michael Jasinski, Shuai Zhang, and Jeremy Stoll (2017), Comparing Storage Estimations for Lake Mead using multi-source satellite altimetry and imagery data, *EOS Trans. AGU Suppl.* 97(59).
- Huilin Gao, Shuai Zhang, Gang Zhao, and **Yao Li** (2017), Advancing the capabilities of reservoir remote sensing by leveraging multi-source satellite data, *EOS Trans. AGU Suppl.* 97(59). (invited)
- Yao Li**, Huilin Gao, Shuai Zhang, and Antonietta Quigg (2017), Chlorophyll-a variations in the Gulf of Mexico in response to the Deepwater Horizon oil spill, *Gulf of Mexico Oil Spill & Ecosystem Science Conference*.
- Changping Huang, Lifu Zhang, Na Qiao, Xia Zhang, **Yao Li** (2015), Vegetation Red-edge Spectral Modeling for Solar-induced Chlorophyll Fluorescence Retrieval at O2-Band, *AGU Fall Abstract*.
- Xiaojun She, Lifu Zhang, Muhammad Hasan Ali Baig, **Yao Li** (2014), "Calculating Vegetation Index Based on the Universal Pattern Decomposition Method (VIUPD) Using Landsat 8," in *Geoscience and Remote Sensing Symposium (IGARSS)*, 2014 IEEE International, pp. 4734-4737.
- Muhammad Hasan Ali Baig, Lifu Zhang, Dongjie Fu, **Yao Li**, et al. (2014), "Water Mapping Through Universal Pattern Decomposition Method and Tasseled Cap Transformation," in *Geoscience and Remote Sensing Symposium (IGARSS)*, 2014 IEEE International, pp. 4758-4760.

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### **FIELD SURVEY**

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Harvey Rapid Response (HRR) Cruises funded by National Science Foundation (2017.09-2018.02)  
Lake surveys across China (e.g. Qinghai Lake, Weishan Lake) from 2013 to 2015.

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### **PROFESSIONAL MEMBERSHIP**

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Member of American Geophysical Union (AGU)  
Institute of Electrical and Electronics Engineers (IEEE)  
IEEE Young Professionals  
American Water Resources Association (AWRA)