

## **YAO LI**

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### **EDUCATION**

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

### **RESEARCH EXPERIENCE**

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

### **TEACHING EXPERIENCE**

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Teaching Assistant, Spring CVEN 602: Remote Sensing in Hydrology, 2018-2020

### **RESEARCH INTERESTS**

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Hydrological remote sensing: leverage multi-source satellite data to derive global lake bathymetry and monitor reservoir storage.

Ocean color: use remote sensing data (e.g., satellite ocean color and field spectroscopy) to address the coastal ocean problems.

### **AWARDS & HONORS**

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2019-2020	Troy Marceleno '60 Fellowship, CVEN, Texas A&M University
2016-2019	Graduate Travel Fund Award, CVEN, Texas A&M University (4 times)
2014	Distinguished Contribution Award, HRS, RADI, Chinese Academy of Sciences
2012	Outstanding Graduate of Beijing, Beijing Municipal Education Commission (Top 1%)
2012	Outstanding Graduate, China University of Geosciences, Beijing (Top 5%)
2011	Honor of Excellent Student, China University of Geosciences, Beijing (Top 5%)
2010	National Third-place 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-place Scholarship, China University of Geosciences, Beijing (Top 3%, 4 times)

### **PROGRAMS**

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2019 Calibration and Validation of Ocean Color Remote Sensing summer program funded by NASA, the University of Maine, and WHOI.

2019 NOAA CoastWatch satellite course funded by NOAA.

## PUBLICATIONS

- Yao Li**, Huilin Gao, Gang Zhao (2020), Global reservoir storage variations from 1984 to 2018, *Earth System Science Data*, to be submitted.
- Yao Li**, Kristen M. Thyng, Chuanmin Hu, Kerri Whilden, Chenghai Yang, Huilin Gao (2020), Evaluation of chlorophyll-a variations along the Galveston Offshore in response to Hurricane Harvey using field spectroscopy and satellite ocean color observations, *Journal of Geophysical Research: Oceans*, in progress.
- Yao Li**, Huilin Gao, Gang Zhao, Kuo-Hsin Tseng (2020), A high-resolution bathymetry database for global reservoirs using multi-source satellite imagery and altimetry, *Remote Sensing of Environment*, accepted.
- Kun Xue, Ronghua Ma, Ming Shen, Yao Li, Hongtao Duan, Zhigang Cao, Dian Wang, Junfeng Xiong (2020), Variations of suspended particulate concentration and composition in Chinese lakes observed from Sentinel-3A OLCI images, *Science of the Total Environment*.
- Kai Liu, Xueke Li, Shudong Wang, **Yao Li**. (2020). Investigating the impacts of driving factors on urban heat islands in southern China from 2003 to 2015. *Journal of Cleaner Production*.
- Kai Liu, Shudong Wang, Xueke Li, **Yao Li**, Bo Zhang, Ruiting Zhai. (2020). The assessment of different vegetation indices for spatial disaggregating of thermal imagery over the humid agricultural region. *International Journal of Remote Sensing*.
- 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*.
- Yao Li**, Huilin. Gao, Michael F. Jasinski, Shuai. Zhang, and Jeremy D. Stoll (2019), Deriving High-Resolution Reservoir Bathymetry from ICESat-2 Prototype Photon-counting Lidar and Landsat Imagery, *IEEE Transactions on Geoscience and Remote Sensing*.
- 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.
- 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, *Proceedings of 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, *Proceedings of*

*Geoscience and Remote Sensing Symposium (IGARSS), 2014 IEEE International*, pp. 4758-4760.  
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

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- Yao Li**, Huilin Gao, Gang Zhao, Kuo-Hsin Tseng (2019), Deriving high-resolution bathymetry for global reservoirs from multi-source satellite imagery and altimetry, *AGU Fall Meeting*.
- 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).
- 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 Meeting*.

## FIELD SURVEY

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Harvey Rapid Response (HRR) Cruises funded by National Science Foundation (2017.09-2018.03).  
Lake surveys across China (e.g. Qinghai Lake, Weishan Lake) from 2013 to 2015.

## 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)  
Journal Referee

Publons Profile: <https://publons.com/researcher/1489120/yao-li/>

*Environmental Research Letters* (6)    *International Journal of Remote Sensing* (1)