

## YAO LI

Zachry Department of Civil and Environmental Engineering  
Texas A&M University, College Station, TX 77843-3136

E-mail: [liyao@tamu.edu](mailto:liyao@tamu.edu)

Phone: (979) 985-1067

### EDUCATION

---

- 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)  
GPA: 3.78/4.00 (Rank 1/60)

### RESEARCH EXPERIENCE

---

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

### TEACHING EXPERIENCE

---

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

### RESEARCH INTERESTS

---

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

---

- 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

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, 1653-1655.

---

### PRESENTATIONS

---

**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

---

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

---

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)