

WeiQi (Tori) Zhou

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Education:

University of Michigan

Ann Arbor, MI

School for Environment and Sustainability (SEAS) | Master of Science in Environmental Informatics & Conservation Ecology
Michigan Institute for Data Science (MIDAS) | Graduate Data Science Certificate April 2019

Wuhan University

Wuhan, China

School of Resource and Environmental Sciences | Bachelor of Science in Geographical Information Science June 2017

Skills:

- **Professional Software:** ArcGIS, Google Earth Engine, ERDAS, QGIS, ENVI, Microsoft Visual Studio, Eclipse, CorelDRAW, MATLAB, PostgreSQL, Microsoft Office
- **Computer Languages:** R, Python, JavaScript, C++, C#
- **Languages:** English and Chinese

Experience:

University of Michigan, School for Environment and Sustainability (Ann Arbor, MI)

Research Associate in Sustainable Agriculture and Remote Sensing June 2019 – Present

- Process and analyze large remote sensing datasets with R, Python, and Google Earth Engine
- Focus on the impact of climate change on crop yield in India and the identification of zero-tillage plots in Mexico

Graduate Student Instructor, EAS538 Natural Resource Statistics January 2019 – April 2019

- Led weekly two-hour statistical programming lab section for 20 students
- Helped students fix R programming problems and understand statistical concepts

Research Assistant, Jain Lab June 2018 – December 2018

- Used MODIS satellite images to detect the long-term dynamic of crop sow date in Indo-Gangetic Plain
- Assisted in literature review and finalization of papers for publication

Master Thesis: High-resolution Remote Sensing to Identify Tree Plantations from Natural Forests and Agriculture in Southern India [Link] January 2018 – April 2019

- Used high-resolution remote sensing images (Sentinel-1 and Sentinel-2) to separate plantation plots, agriculture plots and forest areas in Southern India
- Extracted the satellite data from Google Earth Engine and did the classification using random forest algorithm in R

Wuhan University (Wuhan, China)

Research Assistant, State Key Laboratory of Information Engineering in Survey, Mapping and Sensing

Research subject: Mechanism and Modeling Method of Sponge City Based on Multi Source Spatial and Temporal Data September 2015 – June 2017

- Assisted the supervisor with remote sensing images processing and extracted the urban impervious surface based on mapping satellite image
- Data processing and analysis were carried out in ArcGIS 10.1, ENVI 5.1, and MATLAB 2013a
- Published an article as the third author

Student Researcher, School of Resource and Environmental Sciences

Research subject: Geographic Information System Software Development May 2016 – July 2016

- Built an intelligent tourism system (sample) based on the ArcGIS platform to implement the basic functions and other functions can be extended
- Used ArcMap 10.3 to design and make base maps, published the map on ArcGIS Server 10.3, used Visual Studio 2013 for programming (language: C#, JavaScript), and used Oracle 11g to manage and store spatial data

Publications:

- Zhenfeng Shao, Yuan Zhang, **WeiQi Zhou**, Yang Song. “Long-term monitoring of the urban impervious surface mapping using time series Landsat imagery: A 23-year case study of the city of Wuhan in China”, *Geospatial Information*, pp. 212-216, 2016(DOI: 10.1109/EORSA.2016.7552799)