Ye Tian

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Research Interests

GIScience, geospatial modeling, air pollution, and environmental justice. I applied machine learning, urban morphology theory, air quality modeling, and geovisualization techniques to understand the human-environment interaction systems, such as human mobility patterns, and spatiotemporal disparities of individual exposure to air pollutants.

Education

PhD	GIS	University of Georgia	2017-Present
MS	Cartography and GIS	University of Chinese Academy of Science	2017
BS	GIS	Northwest A&F University	2014

Peer-reviewed Publications

- 1. **Ye Tian***, Priyanka deSouza, Simone Mora, Xiaobai Yao, Fabio Duarte, Carlo Ratti. (2021). "Characterizing synergic effects of meteorological factors on the urban form-air quality relationship through mobile monitoring". *Environmental Science & Technology* (Under Review)
- 2. **Ye Tian**, Xiaobai Yao*, Marguerite Madden. (2021). "Characterizing spatiotemporal pattern of outdoor-exercise exposure to air pollution and the relationships with wind-related urban form factors". *Urban Studies* (Under Review)
- 3. **Ye Tian***, Xiaobai Yao. (2021). "Urban Form, Traffic Volume, and Air Quality: A Spatiotemporal Stratified Approach". *Environment and Planning B: Urban Analytics and City Science* DOI: 10.1177/2399808321995822
- 4. **Ye Tian**, Xiaobai Yao*, Lan Mu, Qinjin Fan, Yijun Liu (2020). "Integrating meteorological factors for better understanding of the urban form-air quality relationship". *Landscape Ecology*. DOI: 10.1007/s10980-020-01094-6
- 5. **Ye Tian**, Xiaobai Yao*, Liding Chen. (2019). "Analysis of Spatial and Seasonal Distributions of Air Pollutants by Incorporating Urban Morphological Characteristics". *Computers, Environment and Urban Systems*. DOI: 10.1016/j.compenvurbsys.2019.01.003
- 6. Shixin Wang, **Ye Tian***, Yi Zhou, Wenliang Liu, Chenxi Lin. (2017). "Building height extraction from multi-polarization SAR imagery based on backscattering model", *Remote Sensing for Land and Resources*. DOI: 10.6046/gtzyyg.2017.02.06
- 7. Shixin Wang, Ye Tian*, Yi Zhou, Wenliang Liu, Chenxi Lin. (2016). "Fine-Scale Population

Estimation by 3D Reconstruction of Urban Residential Buildings", *Sensors*, DOI: 10.3390/s16 101755.

- 8. **Ye Tian***, Shixin Wang, Yi Zhou, Wenliang Liu, Chenxi Lin. (2016). "Urban building height estimation from Radarsat-2 imagery, a case study in Beijing, China", *Geoscience and Remote Sensing Symposium*, 2016 IEEE International, pp.1066-1069. DOI: 10.1109/IGARSS.2016.77 29270
- 9. Chenxi Lin*, Yi Zhou, Shixin Wang, Wenliang Liu, **Ye Tian**, Yannan Zhang. (2016).
- "Variogram-based rural build-up area extraction from middle and high resolution SAR images", *Journal of image and Graphics*. DOI: 10.11834/jig.20160515
- 10. Yi Zhou, Chenxi Lin*, Shixin Wang, Wenliang Liu, **Ye Tian**. (2016). "Estimation of building density with the integrated use of GF-1 PMS and Radarsat-2 data", *Remote Sensing*. DOI: 10.3390/rs8110969

Professional Experiences

Affiliated Researcher	2021-present
Senseable City Lab, Massachusetts Institute of Technology	
Research Assistant	2020-present
The Graduate School, University of Georgia	
Research Assistant	2019 summer
US Army Crops of Engineers, US EPA, and other state agencies	
Teaching Assistant	2018-2020
Department of Geography, University of Georgia	
Research Assistant	2017-2018
The Graduate School, University of Georgia	
Research Assistant	2015-2017
Institute of Remote Sensing and Digital Earth, Chinese Academy of Science	
Research Assistant	2013-2014
Ministry of Educational of the People's Republic of China	

Awards and Honors

Dissertation Completion Award, University of Georgia (\$21,840)	2021			
Graduate Education Advancement Board Fellowship, University of Georgia (\$2500)	2021			
Summer Doctoral Research Assistantship, University of Georgia (\$3,500)	2020			
Innovative and Interdisciplinary Research Grant, University of Georgia (\$2,000)				
Remote Sensing Specialty Group student paper competition (2 nd place), AAG (\$300)	2019			
Graduate School Research Assistantship Block Grants, University of Georgia (\$22,866) 2017				
Merit Graduate, University of Chinese Academy of Sciences	2015			
National Scholarship, Ministry of Educational of P.R. China (Top 1%) (¥8,000)	2013			
Social Elite Scholarship, Shanghai Baosteel Group Corporation (Top 3%) (¥5,000)	2012			
Best Debater in Debate Competition, Northwest A&F University				

National Scholanchin Ministry of Educational of DD, China (Ton 10/) (VS 000)		2011	
National Scholarship, Ministry of Educational of P.R. China (Top 1%) (¥8,000)			
The First Prize Academic Scholarship, Northwest A&F University (Top 5%) (¥2,6			
<u>Teaching Courses</u>			
GIScience for Health and the Environment	Spring	2020	
Air Photo Image Interpretation	Fall	2019	
Introduction to GIS	Spring	2019	
Air Photo Image Interpretation	Fall	2018	
Introduction to GIS	Summer	2018	
Conference Presentations			
American Association of Geography (AAG) (Online)		2021	
University Consortium for Geographic Information Science (UCGIS) (Online))	2021	
American Association of Geography (AAG), Washington, D.C, U.S.		2019	
American Geophysical Union (AGU), San Francisco, CA U.S.			
Urban Environmental Sustainability in a Smart and Connected World, GA U.S.			
American Association of Geography (AAG), New Orleans, U.S.			
Interactive Research & Ideas Symposium, Athens, Georgia, U.S.		2018	
IEEE International Geoscience and Remote Sensing Symposium, Beijing, China	l	2016	
The 20th Conference on Remote Sensing of China, Shenzhen, China,		2016	
Professional Services			
Session chair of GIS DAY at the University of Georgia, Athens, Georgia, U.S.		2018	
IEEE International Geoscience and Remote Sensing Symposium, Beijing, China	ι	2016	
International Symposium on Earth Observation for One Belt and One Road,		2016	
Beijing, China			
The 2 nd Pan-Eurasian Experiment (PEEX) Science Conference, China		2016	
Field Experiences			

Investigating land use change and population immigration, Hebei, China 2016 Analyzing accuracy of population distribution, Beijing, China 2015 Assessing human habitat suitability, Sichuan and Jiangsu, China 2015 Validating different land use types, Shaanxi, China 2013-2014

Personal Skills

Language: Python, MATLAB, R

Software: ArcGIS, Trans CAD, Anaconda, ERDAS Imagine, ENVI, eCognition;

Certificate: National Computer Rank Examination (NCRE) Rank III: C; Personality: Goal-oriented, team-spirited, responsible and self-motivated