Di Yang

Department of Geography
Land Use and Environmental Change Institute (LUECI)
Florida Climate Institute
University of Florida
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EDUCATION

Ph.D. Candidate **2013 - Present**

University of Florida
Geography, Department of Geography.
Advisor: Dr. Michael Binford
Dissertation: Forest Mosaics: Spatial Forest Management Patterns from Stands to Regional Scales in Southeastern U.S. Coastal Plain and Piedmont
Committees: Dr. Peter Waylen, Dr. Gregory Glass, Dr. Wendell Cropper.

M.Sc. **2011 - 2013**

Texas A&M University - Kingsville
Environmental Engineering, Department of Environmental Engineering.
Advisor: Dr. Hongbo Su
Thesis: MODIS-Landsat Data Fusion for Estimating Vegetation Dynamics - A Case Study for Two Ranches in West Texas

B.Sc. **2007 - 2011**

Liaoning University of Petroleum and Chemical Technology
B.S. in Environmental Science

AREAS OF SPECIALIZATION AND INTEREST

Macrosystems ecology (landscape ecology and road ecology), remote sensing and GIS applications on human-environment interactions, land change science, forest management and Volunteered Geographic Information

EXPERIENCE

Teaching Assistant **2016 - Present**

GEO 2422 - Extreme Weather, GEA 3600 - Geography of Africa, GEO 2200 - Physical Geography, Department of Geography, University of Florida.

Dean's Research Assistant **2015 - 2016**

Department of Geography, University of Florida.

Research Assistant **2013 - 2015**

NSF Macrosystems Biology Program: Building forest management into Earth system modeling: Scaling from stand to continent. EF 1241860

Teaching Assistant **2012 - 2013**

Co-Instructor of Course Even 6329 - Environmental Monitoring and Measurements, Department of Environmental Engineering, Texas A&M University - Kingsville.

Research Assistant **2011 - 2012**

Department of Environmental Engineering, Texas A&M University - Kingsville. Collaboration Research with Texas A&M University Wildlife Department focusing on remote sensing data fusion applications on Texas ranches.

PUBLICATIONS

Yu Q, Jiang Q, **Yang D**, Yue D *et al*. Incorporating Temporal and Spatial Variations of Groundwater into Constructing Water-based Ecological Network: a Case Study in Deng Kou County. *Water, 2017*, 9(11): 864. DOI: 10.3390/w9110864.

Huang Y, Yue D, **Yang D**, *et al*. Simulation of Heat Island Based on Data Assimilation and CA Model in Baotou City. *Resources Science*, 2017, 39(11):2197-2207. DOI: 10.18402/resci.2017.11.01.

Cao G, Chu Y, **Yang D**, Southworth J. A New Different Image Creation Methods Based on Deep Neural Networks for Change Detection. *International Journal of Remote Sensing*. 38(23): 7161-7175, 2017. DOI: 10.1080/01431161.2017.1371861.

Yang D, Fu C, Smith A, Yu Q. Open Land-Use Map: A Regional Land-Use Mapping Strategy for Incorporating OpenStreetMap with Earth Observations. *Geo-Spatial Information Science*. 20(3): 269-281, 2017. DOI: 10.1080/10095020.2017.1371385.

Ma H, Yue D, **Yang D**, Zhang Q, Huang Y. Interpolation of Groundwater Depth based on Data Assimilation. *Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery* 04/2017; 48(4):206-214., DOI:10.6041/j.issn.1000-1298.2017.04.027.

Yu Q, Yue D, **Yang D**, H. Ma, Zhang Q. Layout Optimization of Ecological Nodes Based on BCBS Model. *Nongye Jixie Xuebao/Transactions of the Chinese Society of Agricultural Machinery* 12/2016; 47(12):330-336., DOI:10.6041/j.issn.1000-1298.2016.12.041.

Yu Q, Yue D, **Yang D**, Zhang Q, Ma H, Li Y. Simulation on Ecological Land Use Expansion Based on EnKF-MCRP Model. *Nongye Jixie Xuebao/Transactions of the Chinese Society of*

Agricultural Machinery 06/2016; 47(9):285-293., DOI:10.6041/j.issn.1000-1298.2016.09.039. (Annual Best Paper Award)

Yang D, Su H, Yong Y. MODIS-Landsat Data Fusion for Estimating Vegetation Dynamics - A Case Study for Two Ranches in Southwestern Texas. *In Proceedings of the 1st Int. Electron. Conf. Remote Sens*., 22 June-5 July 2015; Sciforum Electronic Conference Series, Vol. 1, 2015, d016; doi:10.3390/ecrs-1-d016.

BOOK CHAPTER

Yang, D. Mapping Regional Landscape by Using OpenStreetMap (OSM): A Case Study to Understand Forest Patterns in Maya Zone, Mexico. Volunteered Geographic Information and the Future of Geospatial Data, February 2017, 138-157; IGI-Global., ISBN: 9781522524465, DOI:10.4018/978-1-5225-2446-5.

PUBLICATIONS UNDER REVIEW/ IN PREP

Marsik M, Fu C, Hall J, Kleindl, Staub, **Yang D**, Binford M. Regional-Scale Forest Management Maps for the Continental United States. *Scientific Data*. In Review.

Yang D, Su H. Multisource Data Fusion Application on Detecting Rapid Phenological Changes: A Case Study in Texas Drylands. *Journal of Applied Remote Sensing*. In Review.

GRANTS

2013-2015	**College of Liberal Arts and Sciences Doctoral Fellowship**, University of Florida	12,000
2015-2016	**Microsoft Azure Research Award**, Microsoft	20,000
2017	**Graduate Student Council Travel Grant**, University of Florida	700
2017	**Digital Globe Imagery Research Grant**	Unlimited Data Access
2017	**Land Use and Environmental Change Institute (LUECI) Travel Grant,** University of Florida,	600
2017	**Office of Research Travel Grant,** University of Florida	400
2013-2017	**Graduate Student Geography Department Travel Grant**	1,200

AWARDS

2018	NASA-MSU Professional Enhancement Award	620
2017	**Annual Best Paper Award**, Transactions of the Chinese Society of Agricultural Machinery	
2017	**Best Paper Award in Geospatial Analysis and Techniques,** University of Florida	150

2013	**Outstanding Master Thesis Award**, Texas A&M University-Kingsville	500
2011-2012	**Merit Scholarship**, Frank H. Dotterweich College of Engineering, Texas A&M University-Kingsville	1,000
2012	**1st Prize** in the 4th Annual Javelina Symposium, Texas A&M University-Kingsville	500

TEACHING EXPERIENCE

Extreme Weather (GEO 2242)

- An introduction to climatology with a focus on extreme events and climate variability. Responsible for all aspects of course, University of Florida. Average enrollment: 140.

Physical Geography (GEO 2200)

- Instructor of online course covering all aspects of physical geography. Responsible for all aspects of course (online exams, quizzes, assignments, grading).
- Since the lecture material was recorded previously, my primary role was to improve the course by developing homework modules and designing an interactive discussion forum

Geography of Africa (GEA 3600)

- Grader of all exams, scientific essays and quizzes. Average enrollment: 170.

WORKSHOPS ORGANIZED

2017 October 26th. Organizer and facilitator, campus wide workshop of "Google Earth Engine JavaScript API for Remote Sensing in Geographic Applications", University of Florida, Gainesville, Florida. Enrollment: 45

- Designed and created tutorials and gave presentations for introducing Google Earth Engine by using API JavaScripts.
- Promote the academic communication of each remote sensing related department.

CONFERENCE PRESENTATIONS

Yang D, Fu C, Binford M. Open Land-Use Map: A Regional Mapping Strategy for Incorporating OpenStreetMap with Earth Observations. 2017 US-IALE Annual Meeting, New Orleans, Louisiana, United States. December 11th - 15th, 2017.

Yang D, Fu C, Binford M. Design and Implementation of a Self-Supervised Cloud Computing Framework to Link Forest Management to Surrounding Lands. 2017 US-IALE Annual Meeting, Baltimore, United States. April 9th - 14th, 2017.

Yang D, Marsik M, Fu C, Ozdes M, Smith A, Binford M. Design and Implementation of a Self-Supervised Cloud Computing Framework to Link Forest Management to Surrounding Lands. 2017 AAG Annual Meeting, Boston, United States. April 5th - 9th, 2017.

Binford M, Marsik M, Fu C, **Yang D**. Mapping the Distribution and Spatial Characteristics of Forest Management in Two Major Forested Areas of the USA. 2017 AAG Annual Meeting, Boston, United States. April 5th - 9th, 2017.
Ozdes M, Smith A, **Yang D**, Southworth J. Evaluation of Vegetation Change in Kruger National Park Using a Markov Chain Monte Carlo Model. 2017 AAG Annual Meeting, Boston, United States. April 5th - 9th, 2017.

Smith A, **Yang D**, Ozdes M, Southworth J. Vegetation Dynamics and Undernutrition: A Spatiotemporal Analysis of NDVI and Child Stunting in Zambia. 2017 AAG Annual Meeting, Boston, United States. April 5th - 9th, 2017.

Yang D. Forest Mosaics: Forest Mosaics: Spatial Forest Management Patterns from Stands to Regional Scales in Southeastern U.S. Coastal Plain and Piedmont. Department of Geography Colloquium. February 9th, 2017.

Yang D, Ozdes M, Smith A, Binford M. Open Source Land-Use Mapping: A Strategy for the Southeastern U.S. Coastal Plain and Piedmont. Southeastern Division of the Association of American Geographers Annual Meeting. November 21st, 2016, Columbia, USA.

Marsik M, Binford M, Fu. C, **Yang, D**, Staub C, Hall J. Mapping Forest Management at Regional Scales in the Southeast U.S. AAG Annual Meeting. March 29th - April 2nd, San Francisco, USA.

Yang D, Marsik M, Fu. C, Hall J, Binford M. Estimating Forest Management Units from Road Network Maps in the Southeastern U.S. AGU Annual Meeting. December 13th - 19th, 2015, San Francisco, USA. Poster

Yang D, Stevens F, Staub C, Hall J, Binford M. How smoothing Affects Disturbance Detection in Decomposed MODIS Time Series? AAG Annual General Meeting. April 8th - 12th, 2014, Tampa, Florida, USA. Poster

Yang D. MODIS-Landsat Data Fusion for Estimating Vegetation Dynamics - A Case Study for Two Ranches in West Texas. Department of Geography Colloquium. October 2013.

Yang D, Su H. MODIS-Landsat Data Fusion for estimating Vegetation Dynamics - A Case Study for Two Ranches in West Texas, 14th Annual CREST – RESSACA Environmental and Energy Sustainability Conference", April 26th - 27th, 2012, Houston, Texas. Poster

SERVICE

Reviewer: Volunteered Geographic Information and the Future of Geospatial Data **2017**

Reviewer: International Journal of Remote Sensing **2015 - Present**

UF Geography Department Graduate Student Representative **2017 - Present**

American Association of Geographers Annual Meeting, Boston, Massachusetts. Volunteer **2016**

Chinese Students Association - President, Texas A&M University-Kingsville **2012 – 2013**

9th Annual Pathways Student Research Symposium. College Station, Texas. Volunteer. **2011**

TECHNICAL SKILLS

- Programming/Software: MATLAB, R, JavaScript, ArcGIS, Linux, IDL
- Data Visualization: MATLAB, ArcMap, Google Earth Engine, ENVI
- Web Design: HTML, CSS, JavaScript

PROFESSIONAL MEMBERSHIPS

- Institute of Electrical and Electronics Engineers (IEEE)
- U. S. Regional Association of the International Association for Landscape Ecology (US-IALE)
- Florida Climate Institute
- American Geophysical Union (AGU)
- Association of American Geographers (AAG)
- American Academy of Environmental Engineers and Scientists (AAEE)