Jason (Jiansheng) Yang

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EDUCATION

Degree	Date	University	Major
Ph.D.	2003	University of Rhode Island	Environmental Sciences
M.Sc.	1999	University of Connecticut	Natural Resources: Air, Water, & Land
B.Sc.	1989	Shanxi University	Physics

TEACHING

Undergraduate Courses Taught

Geog 265: Introduction to Geographic Information Systems (GIS)
Geog 342/542: Introductory Remote Sensing
Geog 343/543: Advanced Remote Sensing

Graduate Courses Taught

Geog 615: Research Methods in Geography
Geog 618: Quantitative Methods in Environmental Geography
Geog 635: Special Topics in Remote Sensing

WORK EXPERIENCES

2017.5-present	Professor, Department of Geography, Ball State University, Muncie, Indiana
2009.8-2017.5	Associate Professor, Department of Geography, Ball State University, Muncie, Indiana
2005.8-2009.8	Assistant Professor, Department of Geography, Ball State University, Muncie, Indiana
2004.9-2005.8	Postdoctoral Associate, Lab for Terrestrial Remote Sensing, University of Rhode Island, Kingston, Rhode Island
2003.9-2004.8	Postdoctoral Associate, Meadowlands Environmental Research Institute (MERI), Rutgers University, Newark, New Jersey
1999.9-2003.8	Graduate Teaching/Research Assistant, Department of Natural Resources Science, University of Rhode Island, Kingston, Rhode Island
1997.9-1999.8	Graduate Research Assistant, Department of Natural Resources Management and Engineering, University of Connecticut, Storrs, Connecticut
1989.9-1997.8	Professional staff, Shanxi University, Taiyuan, Shanxi Province, P. R. China

PRINCIPAL AREAS OF RESEARCH INTEREST

- Terrestrial Remote Sensing (Thermal Infrared, Multispectral, Hyperspectral, etc.)
- Geographic Information Systems (GIS)
- Geospatial Analysis
- Natural resources management and environmental monitoring

REFEREED PUBLICATIONS

Yang, J. and X. Du. 2017. An enhanced water index in extracting water bodies from Landsat TM imagery. *Annals of GIS*. Vol. 23, Iss. 3, p141-148.

Yang, J. and F. Wang. 2016. Land features extraction from Landsat TM image using decision tree method. *International Journal of Remote Sensing Application* (IJRSA), Volume 6. doi: 10.14355/ijrsa.2016.06.011

Yang, J. 2014. Atmospheric Ozone and Ozone Depletion, in *Encyclopedia of Natural Resources: Air.* Taylor and Francis: New York, Published online: 21 Oct 2014; 1050-1054. http://dx.doi.org/10.1081/E-ENRA-120047614

Yang, J. and Li, W. 2013. Feature selection methods in extracting impervious surface from Landsat TM image, *Annals of GIS*, Vol. 19, Iss. 4, p253-261.

Li, S., Zhang, J., and **Yang**, **J**. 2012. Acquisitions of vegetation coverage and cultivated land occupation ratio of Taiyuan Valley Plain using CBERS-02B CCD image. *Advanced Materials Research*, vols. 518-523, pp 5663-5667.

Wang, Y., Zhang, J., Wang, Z., and **Yang, J.** 2012. Monitoring water resource in Taiyuan, China using HJ-1B imagery. *Advanced Materials Research*, vols. 356-360 (2012) pp 2892-2896.

Yang, J. and Artigas F.J. 2010. Mapping salt marsh vegetation by integrating hyperspectral and Lidar remote sensing. In *Remote Sensing of Coastal Environment*. Ed. Y. Q. Wang. CRC press, Taylor & Francis Group, pp 173-187.

Yang, J. 2009. *Estimating Land Surface Temperature from Space: A Remote Sensing Perspective*. VDM Verlag Dr. Muller.

Yang, J., Artigas F. J., and Wang, Y. 2008. Mapping salt marsh vegetation using hyperspectral imagery. In *Wetland and Water resource Modeling and Assessment: A Watershed Perspective*. Ed. Wei Ji. CRC press, Taylor & Francis Group, LLC, pp 21-27.

Yang, J. 2008. Detecting landscape changes pre- and post- surface coal mining in Indiana, USA. *Geographic Information Sciences*, 14 (1):36-43.

Yang, J. and F.J. Artigas. 2008. Estimating impervious surfaces of urban watershed using ASTER data. *Journal of Environmental Informatics,* 12(1):1-8.

Yang, J., Y. Wang, and D.R. Miller. 2007. Estimating air temperature profiles in forest canopies using empirical models and Landsat data. *Forest Science,* 53(1): 93-99.

Artigas F. J. and **J. Yang.** 2006. Spectral discrimination of marsh vegetation types in the New Jersey Meadowlands, USA. *Wetlands*, 26(1): 271-277.

Artigas F. J. and **J. Yang.** 2005. Hyperspectral remote sensing of marsh surface types and plant vigor gradients in New Jersey Meadowlands. *International Journal of Remote Sensing,* 26: 5209 - 5220.

Yang, J., Y. Wang, and P.V. August. 2004. Measuring land surface temperature using spatial interpolation and satellite-derived surface emissivity. *Journal of Environmental Informatics*, 4(1):40-47.

Artigas F. J. and **J. Yang.** 2004. Hyperspectral remote sensing of habitat heterogeneity between tide-restricted and tide-open areas in New Jersey Meadowlands. *Urban Habitat*, 2(1):1-18.

Yang, J. and D.R. Miller. 2002. Trends and variability of ground-level ozone in Connecticut over the period 1981-1997. *Journal of Air & Waste Management Association,* 52:1354-1361.

Yang, J. and Y. Wang. 2002. Using an emissivity calibration model and Landsat-7 ETM+ data to estimate land surface temperature. *Journal of Remote Sensing*, Suppl., 6:104-110.

GRANTS

External

- Acquisition of a Cloud Computing Infrastructure for Inter-/multi-disciplinary Research and Education at a Primarily Undergraduate Institution. Co-PI. U.S. NSF via Ball State University. Oct.1, 2017-Sept. 30, 2020. Funded $260,000.
- *Wetland monitoring and assessment using hyperspectral remote sensing*. Co-PI. U.S. EPA via the New Jersey Meadowlands Environmental Research Institute (MERI). Nov. 15, 2006-Nov. 14, 2008. Funded $77, 500.
- *Characterization of Wetlands Habitats of New Jersey Meadowlands using Hyperspectral AISA Images*. Principal Investigator. Rutgers University. October 1, 2004 – June 30, 2005. Funded $30,000.

Internal

- 2018 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2017 Co-PI for a Digital Scholarship Lab Faculty Fellowship. $9,240.
- 2017 Co-PI for an Advance Program. $5,000.
- 2017 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2016 Building Better Neighborhoods Fund. Ball Brothers Foundation, $5,175.
- 2016 Provost Travel Fund. $2,765.
- 2016 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2015 President Travel Fund. $1800.
- 2015 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2014 College of Science and Humanities Travel Fund. $400.
- 2014 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2013 President Travel Fund. $731.
- 2013 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2012 College of Science and Humanities Travel Fund. $400.
- 2012 ASPiRE International Travel Fund. Sponsored Projects Administration, $400
- 2011 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2010 ASPiRE International Travel Fund. Sponsored Projects Administration, $400.
- 2007 Lilly V. July 1, 2007 – June 30, 2008. $4,100.
- 2006 Lilly V. July 1, 2006 - June 30, 2007. $19,628.
- 2005 Lilly V. August 20, 2005 –August 19, 2006. $11,500.

SCIENTIFIC COOPERATIONS

Submitted grant proposals (not funded)

- with Dr. Lin Li at IUPUI to NASA. *Optical remote sensing for monitoring Indiana Harmful algal blooms (HABs).* Co-PI, August 1, 2017 – July, 2019. Requested: $417,716.
- with Dr. Youfa Wang in FIHW at BSU to National Institutes of Health (NIH). *An innovative system and big data approach to obesity: multi-level complex system examination on obesity etiology, control and prevention in the U.S*. Co-PI, July 1, 2018-June 30, 2020. Requested: $389,057.
- with Dr. Kirk Barrett at Montclair State University to U.S. EPA. *Assessing water quality in small and medium bays of the Great Lakes via remote sensing, 1980s to 2011.* Co-PI, April 10, 2010 – March 31, 2012. Requested: $248,138.
- with Dr. Lin Li at IUPUI to Indiana Space Grant Consortium (ISGC). *Mapping Invasive Plants in Goose Pond Complex in Indiana Using Hyperion and IKONOS Imagery*. PI. August 1, 2006 – March 15, 2007. Requested: $62,507.
- with Dr. John Pichtel in NREM at BSU to U.S. Department of the Interior Office of Surface Mining (OSM). *Use of Remote Sensing for Vegetative and Soil Assessment Pre- and Post- Surface Mining*. PI. September 1, 2006 – August 30, 2007. Requested: $135,859.

Established Cooperation

- Teaming agreement in 2010 between North University of China (NUC), through its Engineering Technology Research Center of Shanxi Province for Opto-Electronic Information and Instrument, a university located in Taiyuan, Shanxi, China, and Ball State University (BSU), a state assisted institution of higher education located in Muncie, Indiana, through its Department of Geography.

Hosted two visiting scholars

- 2013.8. – 2014.8. Hongxia Wang from Shanxi Conservancy Technical College, Taiyuan, China.
- 2014.9. – 2015.9. Shiwei Li from North University of China, Taiyuan, China.