

**VITA**  
**Jason (Jiansheng) Yang**

Associate Professor, Department of Geography  
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**Education**

- PhD, Environmental Sciences, University of Rhode Island, August 2003
- MSc, Natural Resources: Land, Air & Water, University of Connecticut, August 1999
- BSc, Physics, Shanxi University, P. R. China, July 1989

**Teaching**

- Undergraduate Courses Taught
  - Geog 265: Introduction to Geographic Information Systems
  - 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 Geography

**Work Experiences**

- 2009.7-present
  - Associate Professor, Department of Geography, Ball State University, Muncie, Indiana, USA
- 2005.8-2009.7
  - Assistant Professor, Department of Geography, Ball State University, Muncie, Indiana, USA
- 2004.8-2005.8
  - Postdoctoral Associate, Lab for Terrestrial Remote Sensing, University of Rhode Island, Kingston, Rhode Island, USA
- 2003.8-2004.8
  - Postdoctoral Associate, Meadowlands Environmental Research Institute (MERI), Rutgers University, Newark, New Jersey, USA
- 1999.8-2003.8
  - Graduate Teaching/Research Assistant, Department of Natural Resources Science, University of Rhode Island, Kingston, Rhode Island, USA
- 1997.8-1999.8
  - Graduate Research Assistant, Department of Natural Resources Management and Engineering, University of Connecticut, Storrs, Connecticut, USA
- 1989.9-1997.8
  - Engineer/staff, Shanxi University, Taiyuan, P. R. China

## Research Interests

Research interests include application of remote sensing (thermal, multispectral, hyperspectral, LiDAR, etc.) on natural resources management and environmental monitoring. Specific focuses are on remote sensing mapping of wetland habitat, invasive species, and vegetation change pre- and post- surface coal mining.

## Grants

- *Wetland monitoring and assessment using hyperspectral remote sensing*. Co-PI. US Environmental Protection Agency (EPA) via New Jersey Meadowlands Commission (NJMC). Nov. 15, 2006 – Nov. 14, 2008. \$77, 500.
- *Remote Sensing Mapping Wetland Habitats in Northern Indiana*. Principal Investigator. Lilly V. Fund via Ball State University. July 1, 2007 - June 30, 2008. \$4,100.
- *Remote Sensing of vegetation change over surface coal mines in Southwestern Indiana*. Principal Investigator. Lilly V. Fund via Ball State University. July 1, 2006 –June 30, 2007. \$20,000.
- *Long-term Monitoring of Coastal Wetlands Using Hyperspectral and LIDAR Remotely Sensed Data*. Principal Investigator. Lilly V. Fund via Ball State University. August 20, 2005 –June 30, 2006. \$12,000.
- *Characterization and change detection of wetlands habitats of New Jersey Meadowlands using hyperspectral AISA images*. Principal Investigator. Meadowlands Environmental Research Institute (MERI)/CIMIC Center, Rutgers University. January 1, 2005 – June 30, 2005. \$30,000.

## Awards

2001 recipient of Space Imaging Award for Application of High Resolution Digital Satellite Imagery funded by Space Imaging Inc. through American Society for Photogrammetry and Remote Sensing (ASPRS)

## Selected Publications

- Yang, J. and Artigas F. 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.
- Yang, J. 2009. *Estimating Land Surface Temperature from Space*. A Remote Sensing Perspective. VDM Verlag Dr. Muller.
- 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 Artigas, F. J. 2008. Estimating impervious surfaces of urban watershed using ASTER data. *Journal of Environmental Informatics*, 12(1):1-8.
- 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. Taylor & Francis Group, LLC, pp 21-27.
- Yang, J., Wang, Y. and Miller, D. R. 2007. Estimating air temperature profiles in forest canopies using empirical models and Landsat data. *Forest Science*, 53(1): 93-99.
- Artigas F. J. and Yang. J. 2006. Spectral discrimination of marsh vegetation types in the New Jersey Meadowlands, USA. *Wetlands*, 26(1): 271-277.

- Artigas F. J. and Yang. J. 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., Wang, Y. and August, P. V. 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 Yang. J. 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 Miller, D. R. 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 Wang, Y. 2002. Using an emissivity calibration model and Landsat-7 ETM+ data to estimate land surface temperature. *Journal of Remote Sensing*, Vol. 6, Suppl., 104-110.

#### **Presentations at Professional Conference/Workshop**

- 2010: *Detecting salt marsh vegetation changes using hyperspectral remote sensing*. In AAG Annual Conference, Washington, D.C., April 14-18.
- 2009: *Remote sensing and landscape ecology*. Invited by the State Key Laboratory of Urban and Regional Ecology Research Center for Eco-Environmental Sciences, Chinese Academy of Science, July 15.
- 2009: *Remote sensing of environment and its newest development*. Invited by the College of Environmental Resources & Tourism, Beijing Capital Normal University, July 13.
- 2009: *Salt marsh vegetation mapping using hyperspectral and LiDAR remote sensing*. In AAG Annual Conference, Las Vegas, NV, March 22-27.
- 2008: *Characterization of salt marsh vegetation by integrating LiDAR and hyperspectral remote sensing*. On the workshop of Wetland Monitoring and Assessment Using Remote Sensing, New Jersey Meadowlands Environmental Research Institute. October 2.
- 2008: *Integration of Lidar and hyperspectral remote sensing on salt marsh vegetation*. In International Society for Photogrammetry and Remote Sensing (ISPRS), Beijing, China, July 3-11.
- 2008: *Detecting salt marsh vegetation changes by hyperspectral remote sensing*. In AAG Annual Conference, Boston, MA, April 15- 19.
- 2007: *Vegetation change detection using airborne and satellite remote sensing*. On the workshop of Oversea Chinese Professionals in Earth Observation and Digital Earth, sponsored by Center for Earth Observation and Digital Earth (CEODE), Chinese Academy of Science. November 19-21.
- 2007: *Remote sensing of landscape change on surface coal mines in Indiana, USA*. EcoSummit 2007, Beijing, China, May 22-27.
- 2007: *Vegetation change detection of surface coal mines in Indiana, USA*. In AAG Annual Conference, San Francisco, CA, April 17- 21.
- 2006: *Estimation of Methane (CH<sub>4</sub>) Flux in the Sanjinag Plain in Northeast China Using MODIS Data*. In AAG Annual Conference, Chicago, IL, March 7-11.

- 2005: Salt marsh vegetation and invasive species mapping in New Jersey Meadowlands using Hyperspectral AISA imagery. In the International Conference on Poyang Lake Complex Environment System. Nanchang, Jiangxi, China, June 27-29.
- 2005: Mapping impervious surface for New Jersey Watershed Management Area 5 using ASTER imagery. In ASPRS Annual Conference, Baltimore, Maryland, March 7-11.
- 2004: Effects of surface variables on deriving land surface temperature from Landsat TIR data. In ASPRS Annual Conference, Denver, Colorado, May 23-28.
- 2004: Detecting plant vigor gradient in New Jersey Meadowlands using hyperspectral remote sensing imagery. In AAG Annual Conference, Philadelphia, Pennsylvania, March 14-19.
- 2003: Modeling of forest under-canopy temperature using field observation and Landsat-7 ETM+ data. In ASPRS Annual Conference, Anchorage, Alaska, May 5-9.
- 2003: Land-use and Land-cover types and ground-level ozone in the northeastern United State. In AAG Annual Conference, New Orleans, Louisiana, March 5-8.
- 2002: Effecting factors on ground-level ozone in the Northeastern United States. In the 22<sup>nd</sup> FIG ACSM-ASPRS International Conference, Washington, DC, April 19-26.
- 2001: Ground-level ozone and land-cover change in the southern New England. In the 16<sup>th</sup> Annual Northeast ARC (NEARC) Users Group Conference, Worcester, MA, September 23-26.
- 2001: Calibration of land-surface temperature using Landsat-7 ETM+ thermal infrared and ground truth data. In Huangshan International Thermal Infrared Remote Sensing Workshop, Huangshan, Anhui, China, July 17-20.
- 2001: Variability of ground-level ozone and land use/cover change in the southern New England region. In ASPRS Annual Conference, St. Louis, Missouri, April 23-27.