Curriculum Vitae

Date: 9/03/2019

PERSONAL

Name: Shouraseni Sen Roy
 Office Phone: 305-284-4820

3. Current Academic Rank: Professor

4. Primary Department: Geography and Regional Studies, University of Miami

HIGHER EDUCATION

5. Institutional

Institution	Degree PhD	Year
Arizona State University	"An analysis of the spatio temporal patterns of precipitation in India" MPhil	2005
Delhi School of Economics, University of Delhi	"Impact of climatic variability on agro- horticultural production in the western Himalayas: A case study of Kullu District, India"	2001
Central Institute of Education, University of Delhi	BEd. Geography	1999
Delhi School of Economics, University of Delhi	MA Geography	1996
Miranda House, University of Delhi	BA Geography	1994

6. Certification, licensure (description; board or agency; dates):

Description	Board	Date
C ⁺⁺ Computer	International School of Computer	July 1997
Certification	Technology	July 1777
GIS Certification	Arizona State University	May 2005

EXPERIENCE

7. Academic

Rank and Institution	Date
Professor	June 2018 to present
Associate Professor	June 2011 – May 2018
Assistant Professor	August 2005 – May 2011
Department of Geography and Regional Studies	Coral Gables, FL
University of Miami	
Visiting Faculty, Physical Geography and GIS	June 2018 – June 2020
Department of Geography, Henan University	Kaifeng, Henan, China
Graduate Teaching Associate	2002-2005
Arizona State University	Tempe, AZ
Department of Geography	
Adjunct Faculty	2001-2002
Miranda House, University of Delhi	Delhi, India
Research Associate	1999-2000

University of Delhi Environmental Impact Assessment in Mountainous areas Delhi, India Principle Investigator: R. B. Singh (University of Delhi) and James Gardner (University of Manitoba)

Date

2003

Phoenix, AZ

New Delhi. India

New Delhi, India

1997-1998

1996-1997

Worked as a Research Associate in CIDA-SICI project entitled "Environmental Impact Assessment in mountain areas" during 1999-2000 focusing mainly on the impact of variable climatic conditions on the local ecosystem. Indo- Canadian project collaboration between University of Delhi, India and University of Manitoba, Canada.

8. Non-academic

Position and Company
GIS Intern
City of Phoenix
GIS Analyst
CE Infosystems Pvt. Ltd.
GIS Trainee
ML Infomap Pvt. Ltd.

PUBLICATIONS

9. Books and monographs published:

Sen Roy, S. and R. B. Singh, 2002. *Climate Variability, Extreme Events and Agricultural Productivity in Mountain Regions*. Oxford & IBH Publishing Co. Pvt. Ltd., Delhi.

Sen Roy, S. 2018. *Linking Gender to Climate Change Impacts in the Global South.* Springer, Cham, DOI: https://doi.org/10.1007/978-3-319-75777-3, Print ISBN: 978-3-319-75776-6: Online ISBN: 978-3-319-75777-3. https://link.springer.com/book/10.1007/978-3-319-75777-3

10. Juried or refereed journal articles:

- **Sen Roy, S.,** G. Goodrich, and R.C. Balling, Jr., 2003: Influence of El Niño/Southern Oscillation, Pacific Decadal Oscillation, and local sea surface temperature anomalies on peak season monsoon precipitation in India. *Climate Research*, **25**, 171-178.
- **Sen Roy, S.** and R. C. Balling, Jr., 2004: Trends in extreme daily precipitation indices in India. *International Journal of Climatology,* **24**. 457-466.
- Balling, R. C. Jr. and **S. Sen Roy**, 2004: A spatial entropy analysis of temperature trends in the United States. *Geophysical Research Letters*, **31**, L09201. DOI: 10.1029/2004GL019630.
- **Sen Roy, S.** and R.C. Balling Jr.: 2004: Analysis of Hawaiian diurnal rainfall patterns. *Theoretical and Applied Climatology*, **79**, 209-214.
- **Sen Roy, S.** and R. C. Balling, Jr., 2005: Analysis of diurnal patterns of trends in winter precipitation across conterminous United States. *Monthly Weather Review*, **133**. 707-711.
- Balling, R. C. Jr. and **S. Sen Roy**, 2005: Analysis of spatial patterns underlying the linkage between solar irradiance and near-surface air temperatures. *Geophysical Research Letters*, **32**. L12702, DOI: 10.1029/2005GL022444.
- **Sen Roy, S.** and R. C. Balling Jr., 2005: Analysis of trends in maximum and minimum temperature, diurnal temperature range, and cloud cover over India. *Geophysical Research Letters*, **32**. L12702, DOI: 10.1029/2004GL022201.
- **Sen Roy, S.** and R. C. Balling Jr., 2005: Analysis of diurnal precipitation patterns in Puerto Rico. *Caribbean Journal of Science*, **41**, 181-188.
- **Sen Roy, S.**, 2006: Impact of lunar cycle on the precipitation in India. *Geophysical Research Letters*, **33**, L01707, DOI: 10.1029/2005GL024771.

- **Sen Roy, S.** and R.C. Balling Jr., 2006: Analysis of spatial patterns of trends in the frequency and intensity of Indian precipitation. *Mausam*, **57**, 431-436.
- **Sen Roy, S.**, 2006: The impacts of ENSO, PDO, and local SSTs on winter precipitation in India. *Physical Geography*, **27**, 464-474.
- **Sen Roy, S.** and R.C. Balling Jr., 2007: Diurnal variations in summer season precipitation in India. *International Journal of Climatology*, **27**, 969-976.
- **Sen Roy, S.** and F. Yuan, 2007: Patterns and variability of summer NDVI in response to climate variables at the local level in Minnesota. *GIScience & Remote Sensing*, **44**, 166-181.
- Yuan, F. and S. Sen Roy, 2007: Analysis of the relationship between NDVI and climate variables in Minnesota using geographically weighted regression and spatial interpolation. *Proceedings, American Society of Photogrammetry and Remote Sensing Annual Conference, Tampa, Florida, May 7-11, 2007*, unpaginated CD ROM, 6 pp.
- **Sen Roy, S.**, R. Mahmood, D. Niyogi, S. Foster, K.G. Hubbard, E. Douglas, and R. Pielke Sr., 2007: Impacts of the agricultural green revolution induced land use changes on air temperatures in India. *Journal of Geophysical Research Atmospheres*, **112**, D21108, DOI: 10.1029/2007JD008834.
- **Sen Roy, S.** 2008: Impact of aerosol optical depths on seasonal temperatures in India: A spatio-temporal analysis. *International Journal of Remote Sensing*, **29**, 727 740, DOI: 10.1080/01431160701352121.
- Wentz, E.A., D. Nelson, A. Rahman, W.L. Stefanov, **S. Sen Roy**, 2008: Expert system classification of urban land use/cover for Delhi, India. *International Journal of Remote Sensing*, **29**, 4405 4427, DOI: 10.1080/01431160801905497.
- **Sen Roy, S.,** 2009: Spatial variations in the diurnal patterns of winter precipitation in India. *Theoretical and Applied Climatology,* **96**, 347-356, DOI: 10.1007/s00704-008-0045-1.
- **Sen Roy, S.,** 2009: A spatial analysis of extreme hourly precipitation patterns in India. *International Journal of Climatology*, **29**, 345-355, DOI: 10.1002/joc.1763.
- **Sen Roy, S.** and F. Yuan, 2009: Trends in extreme temperatures in relation to urbanization in Twin Cities Metropolitan Area, Minnesota. *Journal of Applied Meteorology and Climatology.* **48**, 669–679.
- **Sen Roy, S.** and R.C. Balling Jr., 2009: Evaluation of extreme precipitation indices using daily records (1910-2000) from India. *Weather*. **64**, 149-152.
- Sen Roy, S. and **S. Sen Roy**, 2010: Regional variability of convection over northern India during the pre-monsoon summer season. *Theoretical and Applied Climatology*. **103**,145–158, DOI 10.1007/s00704-010-0289-4.
- **Sen Roy, S.** and N. Sen Roy, 2011: Influence of Pacific Decadal Oscillation and El Niño-Southern Oscillation on the summer monsoon precipitation in Myanmar. *International Journal of Climatology*. **31**, 14–21, DOI: 10.1002/joc.2065.
- **Sen Roy, S.,** R. Mahmood, A. I. Quintanar, and A. Gonzalez, 2011: Impacts of Irrigation on Dry Season Precipitation in India. *Theoretical and Applied Climatology*. **104**, 193-207, DOI: 10.1007/s00704-010-0338-z.
- **Sen Roy, S.** 2011: The Role of the North Atlantic Oscillation in Shaping Regional Scale Peak Seasonal Precipitation across the Indian subcontinent. *Earth Interactions*, **15**, DOI: 10.1175/2010EI339.1.
- **Sen Roy, S.,** R.B. Singh, and *M. Kumar, 2011: An analysis of local-spatial temperatures patterns in the Delhi metropolitan area. *Physical Geography.* **32,** 114-138.
- **Sen Roy, S**. 2011: Identification of periodicity in the relationship between PDO, El Niño and peak monsoon rainfall in India using S-transform analysis. *International Journal of Climatology*. **31**, 1507-1517.

- *Freedman, R. and **S. Sen Roy.** 2012: Spatial Patterning of Manta birostris in United States East Coast Offshore Habitat. *Applied Geography*. **32**, 652-659.
- Rouault, M., S. Sen Roy, and R.C. Balling Jr., 2013: The diurnal cycle of rainfall in South Africa in the austral summer. *International Journal of Climatology.* **33**, 770–777, DOI:10.1002/joc.3451.
- **Sen Roy, S.** and M. Rouault, 2013: Spatial patterns of seasonal scale extreme hourly precipitation in South Africa. *Applied Geography*, **39**, 151-157.
- **Sen Roy, S.** and R.C. Balling Jr. 2013: Diurnal variations in summertime lightning activity in Tropical Asia. *International Journal of Climatology*. **33**, 1830–1836, DOI: 10.1002/joc.3658.
- **Sen Roy, S.** and R.C. Balling Jr., 2013: Diurnal patterns in lightning activity in northern tropical Africa. *Physical Geography*. **34**, 75-84, DOI:10.1080/02723646.2013.787520.
- **Sen Roy, S.** and R. C. Balling Jr. 2013: Spatial patterns of diurnal variations in summer-season lightning activity across the tropical and subtropical regions of the Northern Hemispheric Americas. *Meteorology and Atmospheric Physics.* **121,** 199–206 DOI 10.1007/s00703-013-0259-3.
- **Sen Roy, S.** and S. Sen Roy. 2013: Diurnal variation in the initiation of rainfall over the Indian subcontinent during two different monsoon years of 2008 and 2009. *Theoretical and Applied Climatology.* **117**, Issue 1-2, pp 277-291, DOI 10.1007/s00704-013-1006-x.
- *Liu, Z. and **S. Sen Roy.** 2014: Spatial Patterns of Seasonal Level Diurnal Variations of Ozone and Respirable Suspended Particulates in Hong Kong. *The Professional Geographer*. **67**, Issue 1, Pages 17-27, DOI:10.1080/00330124.2014.886922.
- Pohl, B., M. Rouault, and **S. Sen Roy**. 2014: Simulation of the annual and diurnal cycles of rainfall over South Africa by a Regional Climate Model. *Climate Dynamics*. **43**, Issue 7-8, pp 2207-2226, DOI 10.1007/s00382-013-2046-8.
- **Sen Roy, S.** and R. C. Balling Jr. 2014: Spatial Patterns of Diurnal Lightning Activity in Southern Africa during Austral Summer. *Atmospheric Research*. **145–146**, August–September 2014, Pages 182–188. doi.org/10.1016/j.atmosres.2014.03.026.
- Song, X., J. Zhang, A. AghaKouchak, **S. Sen Roy**, Y. Xuan, G. Wang, R. He, X. Wang, and C. Liu. 2014. Rapid urbanization and changes in trends and spatio-temporal characteristics of precipitation in the Beijing metropolitan area. *Journal of Geophysical Research Atmospheres.* **119**, 11,250–11,271, DOI: 10.1002/2014JD022084.
- *O'Shea, P.M., **S. Sen Roy,** and R. B. Singh. 2015. Diurnal Variations in the Spatial Patterns of Air Pollution across the Delhi Metropolitan Region. *Theoretical and Applied Climatology*. **124**(3), 609-620, DOI 10.1007/s00704-015-1441-y.
- *Scott, M.C., and **S. Sen Roy.** 2016. Global Emissivity Distribution and Change from 2003 to 2007. *The Professional Geographer.* **68,** 368-379, DOI:10.1080/00330124.2015.1089131.
- Balling, Jr., R.C., M. S. K. Kiany, and **S. Sen Roy.** 2016. Anthropogenic signals in Iranian extreme temperature indices. *Atmospheric Research.* **169,** 96-101, doi:10.1016/j.atmosres.2015.09.030.
- Balling, Jr., R.C., M.S. K. Kiany, **S. Sen Roy**, and J. Khoshhal. 2016. Trends in extreme precipitation indices in Iran: 1951-2007. *Advances in Meteorology*. **2016.** http://dx.doi.org/10.1155/2016/2456809.
- *Scott, M.C., **S. Sen Roy,** and S. Prasad. 2016. Spatial Patterns of Off the System Traffic Crashes in Miami-Dade County, FL during 2005-2010. *Traffic Injury Prevention*. **17**. 729-735. http://dx.doi.org/10.1080/15389588.2016.1144878.
- Moise, I., **S. Sen Roy,** D. Nkengurutse, J. Ndikubagenzi. 2016. Seasonal and Geographic Variation of Pediatric Malaria in Burundi: 2011 to 2012. *International Journal of Environmental Research and Public Health.* **13**, 425; DOI: 10.3390/ijerph13040425.

- **Sen Roy, S.** and R. C. Balling Jr. 2016. Diurnal Variations in Summer Lightning Activity across Southern Hemispheric South America. *Annals of the National Association of Geographers India*. **xxxvi**, 1, 77 -88.
- **Sen Roy**, **S.**, M. S. K. Kiany, and R.C. Balling Jr. 2016. A significant population signal in Iranian temperature records. *International Journal of Atmospheric Sciences*. 2016. http://dx.doi.org/10.1155/2016/1603693.
- **Sen Roy, S.** 2016. Gender Mainstreaming and Climate Change in the Global South. *European Expressions*. Issue **10-102**, 30-32.
- *Louderback, E.R., and **S. Sen Roy**. 2017. Integrating Social Disorganization and Routine Activity Theories and Testing Neighborhood Crime Watch Program Effectiveness: Case Study of Miami-Dade County, 2007-2015. *British Journal of Criminology*. azx062. https://doi.org/10.1093/bjc/azx062.
- *Bunting, R., *O.Y. Chang, *C. Cowen, *R. Hankins, *S. Langston, *A. Warner, *X. Yang, *E. R. Louderback, and **S. Sen Roy.** 2018. Spatial Patterns of Larceny and Aggravated Assault in Miami-Dade County, 2007-2015. *The Professional Geographer.* **70**:1, 34-46, DOI: 10.1080/00330124.2017.1310622.
- **Sen Roy, S.** and Bernardo Loureiro. 2018. Unimproved sources of drinking water and sanitation in the Global South. *Water An Atlas* by Guerrilla Cartography.
- *Cowen, C., *E. R. Louderback, and **S. Sen Roy.** 2018. The role of land use and walkability in predicting crime patterns: A spatiotemporal analysis of Miami-Dade County neighborhoods, 2007–2015. *Security Journal*. https://doi.org/10.1057/s41284-018-00161-7. (Full article link: https://rdcu.be/bdXaH).
- Cao, Y., and **S. Sen Roy.** 2018. Spatial Patterns of Seasonal Level Trends of Groundwater in India during 2002-2016. *Weather*. https://doi.org/10.1002/wea.3370.
- *Conyers, Z.A., R. Grant, and **S. Sen Roy**. 2019. Sea Level Rise in Miami Beach: Vulnerability and Real Estate Exposure. *The Professional Geographer*. **71**: 278-291. DOI: 10.1080/00330124.2018.1531037.
- *Zhai, L., B. Zhang, **S. Sen Roy**, D.O. Fuller, and L. Sternberg. 2019. Remote sensing of unhelpful resilience to sea level rise caused by mangrove expansion: A case study of islands in Florida Bay, USA. *Ecological Indicators*. **97:** 51-58.
- **Sen Roy, S.** 2019. Spatial patterns of trends in seasonal extreme temperatures in India during 1980–2010. Weather and Climate Extremes. **24:** 100203. (https://www.sciencedirect.com/science/article/pii/S2212094718301403?via%3Dihub).
- *Carter, J., *E.R. Louderback, *D. Vildosola, and **S. Sen Roy**. 2019. Crime in an Affluent City: Spatial Patterns of Property Crime in Coral Gables, FL. *European Journal on Criminal Policy and Research*. DOI: 10.1007/s10610-019-09415-5 (Full article link: https://rdcu.be/bIGKH).
- *Vildosola, D., *J. Carter, *E.R. Louderback, and **S. Sen Roy**. 2019. Crime in an Affluent City: Applications of Risk Terrain Modeling for Residential and Vehicle Burglary in Coral Gables, Florida, 2004-2016. *Applied Spatial Analysis and Policy*. DOI: https://doi.org/10.1007/s12061-019-09311-9 (Full article link: https://rdcu.be/bKVSr).

11. Articles under Review and preparation

- *Conyers, Z.A., and **S. Sen Roy**. Modelling the Role of Environmental Variables in Determining the Distribution of the Invasive Burmese Python in Florida. Under Review.
- Cao, Y., and **S. Sen Roy.** Role of LULCC and Seasonal Rainfall on Regional-Level Trends of Groundwater in India during 2002-2016. Under Review.

^{*}student co-author

12. Other works, publications and abstracts:

- **Sen Roy, S.,** 2001: Mitigation and preparedness for extreme events in mountainous areas; http://www.gisdevelopment.net/application/nrm/mountain/mount0004.htm.
- Singh, R. B. and **Sen Roy, S.**, 2003: Impact of climate change on mountain ecosystems; In S. K. Dash and P. Rao (eds). *Assessment of climate change in India;* World Wide Fund for Nature (WWF), 221-230.
- Singh, R. B. and **S. Sen Roy** 2005: Influence of water availability on poverty in India; In S. C. Kalwar, M. L. Sharma, R. D. Gurjar, M. K. Khandelwal and S. K. Wadhawan (eds). *Geomorphology and Environmental Sustainability (Felicitation volume in honor of Professor H. S. Sharma)*; Concept Publishing Company, New Delhi. 319-327.
- **Sen Roy, S.**, 2005: PhD Abstract "An analysis of the spatio temporal patterns of precipitation in India" http://aslo.org/phd/disccrs/200505-2.html.
- **Sen Roy, S.**, 2010: Spatial Statistics. Invited contribution in Barney Warf (ed.) *Encyclopedia of Geography*, Sage Publications.
- Pohl, B., M. Rouault, **S. Sen Roy** 2014: Simulation Des Cycles Diurne Et Annuel Des Pluies En Afrique Du Sud Par Un Modèle De Climat Régional. XXVIIe Colloque de l'Association Internationale de Climatologie2-5 juillet 2014 Dijon (France).
- **Sen Roy, S.** and R. B. Singh. 2015: Role of local level relative humidity on the development of urban heat island across the Delhi Metropolitan Region. Invited contribution in R. B. Singh (ed.) In Urban Development Challenges, Risks and Resilience in Asian Mega Cities, pp. 99-118. Springer, Tokyo.
- Singh, R. B., Swarnima Singh, and **S. Sen Roy** 2016: Assessing Climate Change Signals in Western Himalayan District Using PRECIS Data Model. *Climate Change, Glacier Response, and Vegetation Dynamics in the Himalaya*. Springer International Publishing, 103-115.
- Moise, I. K., and **S. Sen Roy** 2016. Warming and increased rainfall are changing malaria hotspots in the highlands of Burundi. *Atlas of Science*. Accessed on October 2, 2016: http://atlasofscience.org/warming-and-increased-rainfall-are-changing-malaria-hotspots-in-the-highlands-of-burundi/#more-16251
- **Sen Roy, S.**, 2017. Monsoons. Invited contribution in Douglas Richardson, Noel Castree, Michael F. Goodchild, Audrey Kobayashi, Weidong Liu, and Richard A. Marston (eds.) *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*, NY: Wiley–AAG.

PROFESSIONAL

13. Funded Research Performed

- General Research Support Awards (GRSA), University of Miami, award for "Urban Heat Islands and their Spatio-Temporal Characteristics: A Case Study of Delhi Metropolitan Region" for \$4,000
- Miami Consortium for Urban Studies (MICUS), University of Miami, award for pilot study 2006 "Spatial characteristics of Urban Heat Island over Delhi Metropolitan Region" for \$4,388
- Committee for Research and Exploration of the National Geographic Society grant for "Urban Heat Islands in the Delhi Metropolitan Area in the context of climate change: A spatio temporal analysis" for \$10,120
- Provost Research Award, University of Miami, award for "Analysis of spatial patterns of long term temperature trends across the Indian subcontinent", for \$15,814

Provost Research Award, University of Miami, award for "Spatial Patterns and Effects of Long-term Indian Temperature Trends (SPELITT)" for \$17,000	2013
The National Institutes of Health "Outdoor Resting and Sugar Feeding Behaviors of African Malaria Vectors" Amount: \$541,425. Role: Investigator (J.C. Beier, PI). Duration:	2013
March 2013 – February 2016. Effort: 0.2 summer month per year.	
SEEDS You Choose Leadership application for a research field trip to collect data in the	2014
field of gender inequalities/inequities and climate change in Delhi, \$2,500.	
Anne U. White Fund Grant, AAG for \$1,200 to conduct fieldwork in India Linking Gender	2016
Inequalities/Inequities with Impacts of Climate Change in the Global South	
2017 AAG Research Grants for \$500 to collect station level groundwater data in India	2017
Spatial Patterns of Groundwater Depletion across the Indian Subcontinent	
2018-19 Fulbright Nehru U.S. Scholar Grant to conduct research in India on "Impacts of	2018
Urbanization on Groundwater Status: A Study of two Mega Cities in India."	
14. Editorial Responsibilities	
Journals	
Reviewed manuscripts for the following journals:	
ActaTropica (2011)	
Advances in Meteorology (2016)	
Agriculture and Forest Meteorology (2017)	
Applied Geography (2016, 2018)	
Asia Oceanic Geographic Society (2009)	
Atmosfera (2009)	
Atmosphere (2017, 2018)	
Atmospheric Research (2009, 2011, 2012, 2015, 2018)	
Atmospheric Science Letters (2014)	
Climate Dynamics (2012, 2013, 2017, 2019)	
Climate Research (2011, 2012)	
Cogent Social Sciences (2019)	
Earth Interactions (2013, 2017, 2018)	
Emergency Medicine Journal (2018)	
Environmental Management (2010)	
Environmental Research Letters (2011)	
GeoJournal (2014)	
Geophysical Research Letters (2007, 2008, 2009, 2010, 2013, 2015)	
GIScience and Remote Sensing (2007)	
Hydrology (2019)	
Hydrological Sciences Journal Des Sciences Hydrologiques (2009)	
Hydrology and Earth System Sciences (2016)	
International Journal of Biometeorology (2012)	
International Journal of Climatology (2005, 2006, 2007, 2008, 2009, 2011, 2012, 2013	},
2015, 2017, 2018)	
International Journal of Geo-Information (2018)	
International Journal of Remote Sensing (2013, 2016)	
International Journal of Sustainable Transportation (2017)	
ISPRS Journal of Photogrammetry and Remote Sensing (2014)	
Journal of Applied Meteorology and Climatology (2008, 2009, 2014, 2018)	
Journal of Earth System Science (2011)	
Journal of Climate (2016)	

Journal of Geophysical Research - Atmospheres (2012, 2013)

Marine Geodesy (2019)

Meteorology and Applied Physics (2017)

Physical Geography (2016)

PLOS One (2016)

Remote Sensing (2017, 2018)

Scientific Reports (2018)

South African Journal of Science (2018)

Springer Plus (2016)

Sustainability (2017, 2018)

The Open Transportation Journal (2018)

The Professional Geographer (2015)

Theoretical and Applied Climatology (2009, 2013, 2014, 2015, 2016, 2017)

Tellus A: Dynamic Meteorology & Oceanography (2018)

Urban Ecosystems (2013)

Water (2018, **2019**)

Funding Agencies

Reviewed proposals for the following funding agencies:

- NSF Geography and Regional Science Program (2007)
- Paleoclimate Program of NSF (2013)
- National Geographic Society (2007, 2008, 2013)
- NSF Graduate Research Fellowship Program (GRFP) competition (2012, 2014, 2015)
- Reviewed applications from recent PhDs in climate change research for DISsertations initiative for the advancement of Climate Change ReSearch (DISCCRS) (2012).
- NSF Geography and Spatial Sciences Program (2018)

Publishers

Reviewed *Visualizing Physical Geography* by Alan Strahler and Tim Foresman. Published by John Wiley and Sons (2011).

Reviewed *IPCC WGI AR5* First Order Draft. Published by United Nations Framework for Climate Change (2012).

Reviewed *Physical Geography Tomorrow* by Orvis and Tasch Published by W.H. Freeman & Company (2012).

Reviewed Book proposal on *Urban Climate Change and Heat Islands in Kolkata Mega City* for Springer Publishers (2012).

Reviewed *Physical Geography: The Global Environment* by Bruce Gervais Published by W.H. Freeman/Worth Publishers (2013).

Reviewed *Physical Geography: The Global Environment* by Joseph Mason, Peter Muller, James Burt, and Harm de Blij Published by Oxford University Press (2015).

Reviewed IPCC Special Report on 1.5 Degrees (First Order Draft) (2017)

15. Professional and Honorary Organizations (member; officer; date)

American Association of Geographers (2003 to present)

American Geophysical Union (2007 to present)

American Meteorological Society (2015 to present)

Association of Geographical Studies: Delhi Chapter (2000 to present)

International Society of Biometeorology (2008 to 2012) National Association of Geographers India (2000 to present)

16. a. Honors and Awards: Mel Marcus Research Scholarship 2004 Asian Geography Specialty Group Award for Best Student Paper in the AAG 2004 Centennial Meeting 2004. GIS Certificate, Arizona State University 2005 Publication Support Award, College of Arts and Sciences, University of Miami for 2006 \$1,000 Award of "Certificate of Excellence in Acknowledgement of Scholarly and Creative 2009 Activities", University of Miami for \$500 Selected to participate in the Early Career Reviewer (ECR) program at the Center for 2013-Scientific Review (CSR), National Institutes of Health (www.csr.nih.gov/ECR) 2014 SEEDS You Choose Leadership application for a research field trip to collect data in 2014 the field of GI and climate change in Delhi, funded by the College of Arts and Sciences, University of Miami for \$2,500 Publication Support Award, College of Arts and Sciences, University of Miami for 2015 \$500 Anne U. White Fund Grant, AAG for \$1,200 to conduct fieldwork in India 2016 2017 AAG Research Grants for \$500 to collect station level groundwater data in India 2017 Fulbright Specialist Roster, June 16, 2017 to June 16, 2020 2017 2018-19 Fulbright Nehru Academic & Professional Excellence Award – Research in 2018 India "Impacts of Urbanization on Groundwater Status: A Study of Two Mega Cities in India." 21. b. Travel Awards Graduate College Award for Tuition, Arizona State University 2002-2003 Graduate College Award for Tuition, Arizona State University 2003-2004 Association of Pacific Coast Geographers Student Travel Grant 2003 Graduate Professional Students Association Travel Grant, Arizona State University 2003 Graduate College Travel Grant 2004 Earl A. and Lenore H. Tripke Professional Workshop Travel Awards 2004 Asian Geography Specialty Group Award for Best Student Paper in the AAG 2004 Centennial Meeting 2004. Graduate Professional Students Association Travel Grant, Arizona State University 2004 Graduate College Award for Travel to AAG 2005 Graduate Professional Students Association Travel Grant, Arizona State University 2005 International Travel Grant, College of Arts and Sciences, University of Miami for 2006 \$1.500 International Travel Fund, University of Miami for \$1,500 to attend the 2008 International Society of Biometeorology Congress in Tokyo, Japan, September 2008. Travel Grant of \$1000 from the International Society of Biometeorology to attend 2009 the Biometeorology Congress in Auckland, NZ, December 2011 International Travel Grant, College of Arts and Sciences, University of Miami for 2011 \$1,200 to attend International Society of Biometeorology Congress in Auckland, NZ, December 2011.

AAG-NSF Travel Grant for \$1100 to attend IGU Regional Conference Santiago,	2011
Chile November 2011	
International Travel Grant, College of Arts and Sciences, University of Miami for	2013
\$1,200 to attend IGU Regional Conference Kyoto, Japan August 2013.	
AAG-NSF Travel Grant for \$1100 to attend IGU Regional Conference Kyoto,	2013
Japan, August 2013	
International Travel Grant, College of Arts and Sciences, University of Miami for	2015
\$1,200 to attend Gender Summit 6 Asia Pacific August 2015.	
AAG-NSF Travel Grant for \$2000 to attend IGU Regional Congress Beijing, China	2016
August 2016.	
International Travel Grant, College of Arts and Sciences, University of Miami for	2016
\$1,500 to attend IGU Regional Congress Beijing, China August 2016.	

22. Other Professional Activities (e.g., papers presented; performances; conference proceedings; seminar or conference panel member; catalogue work; etc.):

- Singh, R.B. and S. Sen Roy, (2000a)"Impact of Climatic Variability on Agriculture, Horticulture and Extreme Events," in CIDA- SICI dissemination Workshop- Urban Development and Environmental Impacts in a Mountain Context, Delhi, India.
- Singh, R.B. and **S. Sen Roy**, (2000b)"Climatic Variability and Extreme Events in Kullu District," 21st Indian Geography Congress, Nagpur, India.
- **Sen Roy, S.** (2001)"Agro-horticultural responses to Variable Climatic Conditions: A Case Study of Kullu District," in the 23rd Indian Geography Congress (NAGI) at Dr. Hari Singh Gaur University, Sagar, India.
- Singh, R.B. and **S. Sen Roy**, (2001)"Climatic Variability and Vulnerable Apple Production in Kullu Himalaya," in H.P. University organized seminar on Geographical Perspectives on the Environmental Degradation and Sustainable Development of the Himalayas: Issues for the 21st Century, Shimla, India.
- **Sen Roy, S.** and R. B. Singh, (2002) "Impact of Climate Change on Mountain Ecosystems," in WWF-IIT organized seminar on Assessment of Climate Change in India, Delhi, India.
- Brooks, T. J., B. Hedquist, G. Goodrich, A. Kalkstein, **S. Sen Roy**, and N. Palicherla, (2003) "Has Urbanization Decreased daily Temperature Range in Metropolitan Phoenix," in the 47th Annual Meeting of the Arizona Nevada Academy of Science.
- **Sen Roy, S.** (2003) "Agro-Horticultural Responses to Climatic Variability in Mountainous Areas: A Case Study of Kullu District," in the Annual Meeting of the Association of Pacific Coast Geographers, Portland, Oregon, USA.
- **Sen Roy, S.** (2004) "A study of the spatial patterns in the trends of precipitation in India," in the Annual Meeting of the Association of American Geographers, Philadelphia, USA.
- **Sen Roy, S.** (2005) "Analysis of trends in maximum and minimum temperatures, DTR, and cloud cover over India," in the Annual Meeting of the Association of American Geographers, Denver, USA.
- **Sen Roy, S.** (2006) "Impact of lunar cycle on precipitation in India," in the Annual Meeting of Annual Meeting of the Association of American Geographers, Chicago, USA.
- **Sen Roy, S.** (2007a) "A spatio temporal analysis of urban thermal structures in the Twin Cities Metropolitan Area," in the Annual Meeting of the Association of American Geographers, San Francisco, USA.
- **Sen Roy, S.** (2007b) "Analysis of trends in extreme hourly precipitation events in India," in the American Geophysical Union Fall Meeting, San Francisco, USA.
- **Sen Roy, S.** (2008a) "Analysis of trends in extreme hourly precipitation events in India," in the Annual Meeting of the Association of American Geographers, Boston, USA.

- **Sen Roy**, **S.** (2008b) "Spatial patterns of air pollution in Delhi Metropolitan Region and its impact on UHI phenomena at the seasonal scale," in the International Society of Biometeorology Congress, Tokyo, Japan.
- **Sen Roy, S.** (2008c) "Analysis of spatial patterns in near surface micro climatic conditions within Delhi Metropolitan Region," in the American Geophysical Union Fall Meeting, San Francisco, USA.
- **Sen Roy, S.** (2009) "Spatial variations in seasonal scale UHI development in Delhi Metropolitan Region," in the Annual Meeting of the Association of American Geographers, Las Vegas, USA.
- **Sen Roy, S.** (2010) "Role of NAO on regional level precipitation patterns over the Indian subcontinent," in the Annual Meeting of the Association of American Geographers, Washington DC, USA.
- **Sen Roy, S.** (2011a) "Local level spatial patterns of temperature and relative humidity levels across the Delhi Metropolitan Region," in the Regional Geographic Conference organized by the International Geographic Union, Santiago, Chile.
- **Sen Roy, S.** (2011b) "Spatial analysis of hourly extreme precipitation across South Africa," in the 19th International Congress of Biometeorology, 4-8 December 2011, The University of Auckland, New Zealand.
- **Sen Roy, S.** (2011c) Session Chair "Modeling," in the 19th International Congress of Biometeorology, 4- 8 December 2011, The University of Auckland, New Zealand.
- **Sen Roy, S.** (2013a) Member of the International Scientific Advisory Committee of the International Geographic Union Conference on Geoinformatics for Biodiversity and Climate Change, March 14-16, 2013, Rohtak, India.
- **Sen Roy, S.** (2013b) Climate change and extreme weather events. Invited Speaker to the FIU Executive MBA Program, March 23rd 2013 Miami, USA.
- **Sen Roy, S.** and Balling, R.C. Jr. (2013a) "Diurnal variations in summertime lightning activity in Tropical Asia," in the Annual Meeting of the Association of American Geographers, Los Angeles, USA.
- **Sen Roy, S.** and R. C. Balling Jr. (2013b) "Spatial patterns of diurnal variations in summer-season lightning activity across the tropical and subtropical regions of the Northern Hemispheric Americas," in the Regional Geographic Conference organized by the International Geographic Union, August 4-9, 2013, Kyoto, Japan.
- **Sen Roy, S.** (2014a) "Relationship between Arctic Oscillation and Subdivision Level Peak Season Precipitation across the Indian Subcontinent," in the Annual Meeting of the Association of American Geographers, Tampa, USA.
- Pohl, B., M. Rouault, **S. Sen Roy** (2014) "Simulation Des Cycles Diurne Et Annuel Des Pluies En Afrique Du Sud Par Un Modèle De Climat Régional," XXVIIe Colloque de l'Association Internationale de Climatologie2-5 juillet 2014 Dijon (France).
- **Sen Roy, S.** (2014b) Member of the International Scientific Advisory Committee of the International Geographic Union Conference on Geohazards, Resource Sustainability and Mountain Response to Global Change, June 4-5, 2014, University of Kashmir, Srinagar-190006, Jammu and Kashmir, India.
- **Sen Roy, S.** (2014c) Twentieth session of the Conference of the Parties (COP 20) and tenth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. Observer-NGO, Nominated by American Association of Geographers, December 8-11, 2014, Lima, Peru.
- **Sen Roy, S.** (2015a) "Spatial patterns of air pollution in the Delhi Metropolitan Region," in the 95th Annual Meeting of the American Meteorological Society's Air Pollution Meteorology and Human Health Symposium, January 4-8, 2015, Phoenix, USA.

- *Scott, M.C., and **S. Sen Roy** (2015) "Global Emissivity Distribution from 2003 to 2007 and Contributors to its change in the Iranian Plateau, the La Plata and the Indus River Basin," in the 95th Annual Meeting of the American Meteorological Society's 20th Conference on Satellite Meteorology and Oceanography, January 4-8, 2015, Phoenix, USA.
- **Sen Roy, S.** (2015b) ESRI User Conference 2015. July 20-24, 2105, San Diego, USA.
- **Sen Roy, S.** (2015c) "Linking Gender Inequalities/Inequities with Impacts of Climate Change in the Global South," in the Gender Summit 6 Asia Pacific, August 26-28, 2015, Seoul, South Korea.
- **Sen Roy, S.** (2015d) Twenty-first session of the Conference of the Parties (COP 21) and eleventh session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol. Observer-NGO, Nominated by Association of American Geographers, November 30 December 7, 2015, Paris, France.
- **Sen Roy, S.** (2015e) Gender Summit Asia Pacific Advisory Board on the report to mainstream gendered research into the Sustainable Development Goals (SDGs).
- **Sen Roy, S.** (2016a) Member of the International Scientific Advisory Committee of the International Geographic Union Conference on Land Use Change, Climate Extremes and Disaster Reduction, March 18-20, 2015, Department of Geography, Shaheed Bhagat Singh College, University of Delhi, Delhi, India.
- **Sen Roy, S.** (2016b) American Association of Geographers, March 27 April2, 2016, San Francisco, USA.
- **Sen Roy, S.** (2016c) "Gendered Analysis of Climate Change Impacts on Water," in The 33rd International Geographic Congress organized by the International Geographic Union, August 21-25, 2016, Beijing, China.
- **Sen Roy, S.** (2016d) Digital Humanities Digital Journalism Conference. September 29th October 1st, 2016, Miami, USA.
- **Sen Roy, S.** (2016e) "Spatial Patterns of Vulnerability to Climate Change Impacts on Water Resources in the Global South" Invited Presentation, 6th International Conference on Changing Dimension of Water Resource: A Challenge before Mankind. November 18-20, 2016, Patna, India.
- **Sen Roy, S.** (2017a) Invited Panelist on Datafication & the City. Smart Cities Conference, Center for Computational Sciences, University of Miami, February 23, 2017.
- *Cowen, Christopher C., *Eric R. Louderback, and **S. Sen Roy**. (2017) "Land Use, Walkability and Crime Patterns: A Case Study of Miami-Dade County, 2007-2015," Presented at the Academy of Criminal Justice Sciences 54th Annual Meeting, March 21-25, Kansas City, MO.
- **Sen Roy, S.** (2017b) "Spatial Patterns of Long Term Trends in Daily Temperatures across the Indian Subcontinent," in April 2017, Annual Meeting of the American Association of Geographers, Boston, USA.
- Sen Roy, S. (2017c) ESRI User Conference 2015. July 8-12, 2107, San Diego, USA.
- **Sen Roy, S.** (2018a) "Spatial Patterns in the Trends in Annual and Seasonal Scale Extreme Temperatures in India," in the 98th Annual Meeting of the American Meteorological Society's 31st Conference on Climate Variability and Change, January 7-11, 2018, Austin, USA.
- **Sen Roy, S.** (2018b) "Geovisualizing Miami through space and time," Invited Lecture, Department of Computer Science Seminar Series, University of Miami, January 24, 2018, Miami, USA.
- **Sen Roy, S.** (2018c) "Seasonal Scale Trends of Extreme Temperatures in India," in April 2018, Annual Meeting of the American Association of Geographers, New Orleans, USA.
- **Sen Roy, S.** (2019a) "The Three "E" Approach to Gender Mainstreaming in Climate Change: Enumeration, Education, Empowerment." Invited Lecture to International Conference on Society and Sustainability: An Interdisciplinary Approach organized by The Department of

- Geography, Vivekananda College, Kolkata jointly with The Eastern Geographical Society, January 12-12, 2019, Kolkata, India.
- **Sen Roy, S.** (2019b) Invited Session Chair, "Geography of Gender and Women's Empowerment," International Conference on Society and Sustainability: An Interdisciplinary Approach organized by The Department of Geography, Vivekananda College, Kolkata jointly with The Eastern Geographical Society, January 12-13, 2019, Kolkata, India.
- *Conyers, Z.A., R. Grant, and **Sen Roy, S.** (2019a) "Assessment of the relationship between vulnerability to sea level rise and property values: A case study of the City of Miami Beach 2009-2017," Invited Lecture, Department of Geography, Delhi School of Economics, University of Delhi, February 12, 2019, Delhi, India.
- Sen Roy, S. (2019c) South and Central Asia Fulbright Conference. February 25-27, Kochi, India.
- **Sen Roy, S.** (2019d) "Linking Gender Inequalities/Inequities with Impacts of Climate Change in the Global South" Invited Plenary Lecture, International Conference on Climate Change, Sustainability and Livelihood, Organized by Nirmala College, Ranchi in association with Center for Environment and Economic Development (CEED), A Research Institute affiliated with NITI Ayog, Government of India, March 9-10, 2019, Ranchi, India.
- *Conyers, Z.A., R. Grant, and **Sen Roy, S.** (2019b) "Assessment of the relationship between vulnerability to sea level rise and property values: A case study of the City of Miami Beach 2009-2017," Invited Lecture, Department of Geography, Jamia Millia Islamia, March 12, 2019, Delhi, India.
- Sen Roy, S. (2019e) "Climate Change: Case studies of India and Miami, USA," Invited Public Lecture, Center for Geoinformatics, Jamsetji Tata School of Disaster Studies, Tata Institute of Social Sciences, April 2, 2019, Mumbai, India.
- **Sen Roy, S.** (2019f) Restoring Water Restoring Nature II, Organized by Water Digest, May 3, 2019, New Delhi, India.

17. Workshops

- 1. Blackboard 5.0 and 6.0 (Parts I), Fall 2004.
- 2. Third National Center of Competence in Research on Climate (NCCR) Climate Summer School, 2004, Monte Verita, Ticino, Switzerland.
- 3. Becoming an Effective Mentor, Spring 2005.
- 4. Preparing Future Faculty (Exploratory Phase), 2004-2005.
- 5. Participant in Geography Faculty Development Alliance workshop, funded by National Science Foundation, Boulder, Colorado, June 2005.
- 6. Participant in Space Workshop entitled "GIS and Spatial Modeling for Use in Undergraduate Education," funded by National Science Foundation, Ohio State University, Columbus, Ohio, July 2005.
- 7. Participated in "Dissertations Initiative for the Advancement of Climate Change Research (DISSCRS)," March 26th April 1st 2006.
- 8. Participated in ACC Faculty development grants sponsored three-week research trip to meet with researchers in Vietnam and China under the topic of "Water resources research in major watersheds in southeast Asia" with 11 other professors from Atlantic Coast Conference universities, June 2006.
- 9. Participant in Spatial Analysis Laboratory workshop entitled "Foundations of Spatial Regression," University of Illinois, Urbana Champaign, Illinois, June 2007.
- 10. Participant in Spatial Analysis Laboratory workshop entitled "Frontiers of Spatial Regression", University of Illinois, Urbana Champaign, Illinois, June 2007.

^{*}student co-presenter/author

- 11. Summer Institute Fellow, University of Miami Workshop focusing on providing faculty in the College of Arts and Sciences with tools and strategies to integrate writing instruction approaches into content-based classes for undergraduates enrolled in College of Arts and Sciences classes, May 2008.
- 12. Blackboard 9.1. Summer 2011.
- 13. Intermediate Crime Mapping Using ArcGIS 9.3, as part of Eleventh Crime Mapping Research Conference: Crime, Social Ills, and Place-Based Solutions in Miami, Florida, October 17-18, 2011.
- 14. NSF EarthCube Domain End-User Workshop: Engaging the Atmospheric Cloud/Aerosol/Composition Community. George Mason University, Fairfax, VA, October 21 to 22, 2013.
- 15. Faculty Learning Community Fellow 2014, University of Miami.
- 16. 2018-2019 Engaged Faculty Fellows Program, University of Miami.
- 17. Workshop on National Information Systems for Climate and Environment (NICES) and its activities. Jointly organized by Department of Geography, Jamia Millia Islamia, New Delhi, and National Remote Sensing Center (NRSC), ISRO, January 29, 2019, New Delhi, India.

TEACHING

23. Teaching Specialization (courses taught):

University of Miami		
GEG 591 Introduction to GIS	2010 to present	
FSS 195 Extreme Weather	2008 to present	
GEG 405/681 Advanced Spatial Statistics/ Spatial Statistics II	2008 to present	
GEG 120 Physical Geography	2005 to present	
GEG 199 Introduction to GIS	2005 to present	
GEG 391/GEG 410/GEG 693 Intermediate GIS/GIS II	2011 to present	
GEG 414 Crime Mapping and Analysis	2016 to present	
GEG 201 Seasons and Life on Earth	2016 to present	
GEG 332 Climatology and Extreme Weather	2017 to present	
Arizona State University		
GPH 111 Introduction to Physical Geography	2004	
GCU 326 Geography of Asia	2004	
GPH 111 Introduction to Physical Geography (Laboratory)	2002-2005	
GPH 370 Geographic Information Technology	2002	
Miranda House, University of Delhi		
Paper XII Field Survey	2001-2002	
Paper XIII Economic Geography	2001-2002	

24. Thesis and Dissertation Advising/Post-doctoral student supervision

Student	Degree	Date
Matthew Kapolka	a MA Geography (Chair)	Completed 2007
Peter Finocchio	Undergraduate Thesis (Committee Member)	Completed 2009
Amy Cohen	MA Geography (Committee Member)	Completed 2009
Michael Parenti	MA Geography (Committee Member)	Completed 2010
Brooke Gintert	PhD Marine Geology (Committee Member)	Completed 2011
Chao Fan	MA Geography (Committee Member)	Completed 2011
Ryan Freedman	BS Marine Affairs, Minor Geography (Committee Member	er) Completed 2011
Gemma Valls	MA Geography (Chair)	Completed 2011

Karolina Janik	MA Geography (Committee Member)	Completed 2012
Yu Wang	MA Geography (Committee Member)	Completed 2012
Nancy Morris	MA Geography (Committee Member)	Completed 2012
Zhen Liu	MA Geography (Chair)	Completed 2013
Rolando Santos	PhD Marine Geology (Committee Member)	Completed 2014
Tanjim Hossain	Ph.D. in Environmental Science and Policy (Reader)	Completed 2014
Eric R. Louderbac	ck MA Sociology (Committee Member)	Completed 2015
M. Chance Scott	MA Geography (Chair)	Completed 2015
Julius Dewald	MA Geography (Committee Member)	Completed 2015
Juan Pedreño	MA Geography (Committee Member)	Completed 2016
Xiaxia Yang	MA Geography (Committee Member)	Completed 2016
Amelia Abe	BA WGS Undergraduate Thesis (Chair)	Completed 2017
Zella A. Conyers	MA Geography (Chair)	Completed 2017
Eric R. Louderbac	ck PhD Sociology (Committee Member)	Completed 2018
Jacklyn Collins	PhD Higher Education (Committee Member)	Completed 2018
Zara Masood	PhD Communications (Qualifying Exam Committee Mem	ber) Completed 2018
Nan Yao	PhD Biology FIU (Committee Member)	Completed 2019

SERVICE 25. Community Activities:

1.	Volunteer, Geofest, Arizona State University	2002
2.	Judge, CARSEF Engineering Fair, Arizona State University	2003
3.	Volunteer, SEE Arizona State University (elementary school outreach)	2004
4.	Volunteer, SEE Arizona State University (elementary school outreach)	2005
5.	Faculty Advisor to Gamma Theta Upsilon (GTU) Society, University of Miami	2006 - 2007
6.	Speaker Series Coordinator, Department of Geography Regional	Fall 2007 to Spring
_	Studies, University of Miami	2008
7.	Judge at the Research and Creativity Forum, University of Miami	Spring 2008, 2016, 2017
8.	Director: Geospatial Certificate, Department of Geography and	Fall 2010 to Spring 2011
	Regional Studies, University of Miami	Summer 2014
9.	Reviewer for Beyond the Book Scholarship Program at the University of Miami	2009
10.	Director of Undergraduate Studies, Department of Geography and	Fall 2008,
	Regional Studies, University of Miami	Fall 2009 to Fall 2011
		Fall 2012 to Spring
		2015
		Fall 2018
11.	Core Faculty Member: Geospatial Certificate, Department of Geography and Regional Studies, University of Miami	Fall 2010 onwards
12.	Search Committee Member for the hiring of Director, Geospatial Certificate Program, Department of Geography and Regional Studies, University of Miami.	Spring 2011
13.	Member of Committee for Faculty Development and Governance at University of Miami	Fall 2011

14. Search Committee Chair for the hiring of a Tenure Track faculty in Medical Geography, Department of Geography and Regional Studies, University of Miami.	Fall 2012
15. Search Committee Member for the hiring of Director, Geospatial Certificate Program, Department of Geography and Regional Studies, University of Miami.	Spring 2012
16. Reviewer for ACC-IAC Creativity and Innovation Fellowship applications at the University of Miami	Spring 2012
17. Mentor for Support to Improve Climate Change Research and Information Services in South Asia (SICRISA). Project funded by the UK Department for International Development (DFID)	Fall 2012 to Summer 2013
18. Biweekly Newsletter for the Department of Geography and Regional Studies, University of Miami	Fall 2012 to Spring 2015
19. Chair of the Search Committee for hiring a Tenure Track faculty in Medical Geography, Department of Geography and Regional Studies, University of Miami.	Fall 2012
20. Member of the Search Committee for hiring a Visiting Assistant Professor, Department of Geography and Regional Studies, University of Miami.	Spring 2013
21. Chair of the Search Committee for hiring a Tenure Track faculty in Environmental Health, Department of Geography and Regional Studies, University of Miami.	Fall 2013 to Spring 2014
22. Member of the Search Committee for hiring a Visiting Assistant Professor jointly with Center for Environmental Science and Policy.	Fall 2013
23. Faculty Senate Voting Member for College of Arts and Sciences, University of Miami	Fall 2014 to Fall 2018
24. Alternate Graduate Council Representative for the College of Arts and Sciences, University of Miami	May 2014 to Spring 2017
25. Member, Faculty Senate Women and Minorities Committee, A Standing Committee of the University Faculty, University of Miami	Fall 2014 – Spring 2016
26. Interim Director of the Certificate in Geospatial Technologies	Summer 2014
27. Member of the Search Committee to hire a tenure track faculty in the area of Human Computer Interaction/Data Visualization (HCI/DV), Department of Computer Science, University of Miami	Fall 2014 to Spring 2015
28. Internship Coordinator, Department of Geography and Regional Studies, University of Miami	Fall 2014 to Spring 2015
29. Member of the Faculty Advisory Board for the College of Arts and Sciences Interdisciplinary Program in Urban Studies, University of Miami	Fall 2014 to Spring 2017
30. Ad hoc committee to address University long-term goals or strategic plans, University of Miami	Fall 2014 to Spring 2015
31. Invited reviewer of applications for Foot Fellows in College of Arts and Science, University of Miami	Spring 2015
32. Chair, Faculty Senate Women and Minorities Committee, A Standing Committee of the University Faculty, University of Miami	Fall 2015 to Spring 2018
33. Chair, Faculty Senate Equity and Inclusion Committee, A Standing Committee of the University Faculty, University of Miami	Fall 2017 to Spring 2018
34. Assisted in managing table for promoting the Geospatial Certificate Program at the Department of Geography and Regional Studies,	Summer 2015, 2017

University of Miami, in ESRI User Conference 2015. July 20-24, 2015, San Diego, USA.	
35. Member of Graduate Program Subcommittee, Department of Geography and Regional Studies, University of Miami	Fall 2015
36. Departmental Representative on Curriculum Committee, College of Arts and Sciences, University of Miami	Fall 2016 to Fall 2018; Fall 2019 to
,	Spring 2022
37. Nominated to the AAG Publications Committee	July 2016 to June 2019
38. Member of Center of Computational Sciences (CCS), University of Miami	November 2016 to November 2019
39. Member of the Climatology Commission of International Geographic Union (IGU)	December 2016 onwards
40. Member of the Provost Search Committee, University of Miami	January 2017 to August 2017
41. College of Arts and Sciences Representative on General Welfare Committee of Faculty Senate	Fall 2017 to Spring 2019
42. Model Class for Scholarship Weekend at University of Miami February 17, 2018	February, 2018
43. Engaged Faculty Fellow 2018-2019, University of Miami	2018-2019
44. Member, Faculty Senate Committee on Rank, Salary, and Conditions of Employment, University of Miami	2018-2023 (On sabbatical leave
	Spring 2019)
45. Member, Faculty Senate ad hoc committee to review University Sexual Misconduct Policy, University of Miami.	Fall 2018
46. Director of Graduate Studies, Department of Geography and Regional Studies, University of Miami	Fall 2019 onward

26. Other Professional Activities:

- Special Issues
 - 1. Organizer of special issue on "Climate Change and Health," in *Earth Interactions* Journal, 2016
- Academic Journal Board Member:
 - 1. Cogent Social Sciences: Geography