NEIL DEBBAGE

Curriculum Vitae – September 2024

Associate Professor (336) 501–0241 neil.debbage@utsa.edu Research Gate Google Scholar Geography and Environmental Sustainability
Department of Political Science and Geography
The University of Texas at San Antonio
One UTSA Circle
San Antonio, TX 78249

EDUCATION

2018 – Ph.D., Geography, University of Georgia

Dissertation: "Urban Flooding Vulnerability: A Multifaceted Comparative Assessment of the Charlanta Megaregion"

GPA: 4.0

2014 – M.S., Geography, University of Georgia

Thesis: "Quantifying Urban Form via Spatial Metrics and its Climatic Implications" GPA: 4.0

2012 – B.A., Geography, University of Georgia Geographic Information Science Certificate GPA: 4.0

PROFESSIONAL EXPERIENCE

- 2023 Present Associate Professor of Geography and Environmental Sustainability,
 Department of Political Science and Geography, The University of Texas at San Antonio
- 2018 2023 Assistant Professor of Geography and Environmental Sustainability, Department of Political Science and Geography, The University of Texas at San Antonio
- 2012 2018 Teaching & Research Assistant, Department of Geography, University of Georgia
- 2013 Summer Intern, Esri Professional Services Department, Redlands, CA
- 2009 2011 Summer Intern, Geographic Information Services, Guilford County, NC

REFEREED JOURNAL ARTICLES

*Student Co-Author

In Revision – Debbage, N., Atasoy, M., Mitra, C., and Byahut, S. Urban Climate Action Plans in the United States: A Textual Content Analysis and Evaluation. *Sustainable Cities and Society*.

(Journal Impact Factor = 10.5)

- 2023 *Dumlao, A., and Debbage, N. Examining the Spatial Proximity of Vulnerable Communities to Cooling Centers across the Texas Triangle Megaregion. *Weather Climate and Society*, 15(4), 1085–1098, doi: 10.1175/WCAS-D-22-0125.1. (Journal Impact Factor = 1.9)
- 2023 Miller, P., and Debbage, N. Weakly Forced Thunderstorms in the Southeast U.S. are Stronger Near Urban Areas. *Geophysical Research Letters*, 50(18), doi: 10.1029/2023GL105081.

 (Journal Impact Factor = 5.2; Article Citations = 2)
- 2022 *Forney, R., Debbage, N., Miller, P., and *Uzquiano, J. Urban effects on weakly forced thunderstorms in the Southeast United States. *Urban Climate*, 43: 101161, doi: 10.1016/j.uclim.2022.101161.

 (Journal Impact Factor = 6.0; Article Citations = 9)
- 2021 Wang, M., and Debbage, N. Urban morphology and traffic congestion: Longitudinal evidence from US cities. *Computers, Environment and Urban Systems*, 89: 101676, doi: 10.1016/j.compenvurbsys.2021.101676.

 (Journal Impact Factor = 7.1; Article Citations = 61)
- 2021 *Guerra, J., and Debbage, N. Changes in urban land use throughout the Edwards Aquifer: A comparative analysis of Austin, San Antonio, and the Interstate–35 corridor. *Applied Geography*, 133: 102480, doi: 10.1016/j.apgeog.2021.102480.

 (Journal Impact Factor = 4.0; Article Citations = 6)
- 2019 Debbage, N. Multiscalar spatial analysis of urban flood risk and environmental justice in the Charlanta megaregion, USA. *Anthropocene*, 28: 100226, doi: 10.1016/j.ancene.2019.100226.
 Invited Paper for the Special Virtual Collection on Urban Hydroclimate Risks (Journal Impact Factor = 3.3; Article Citations = 40)
- 2019 Debbage, K., and Debbage, N. Aviation carbon emissions, route choice and tourist destinations: Is flying non-stop a remedy? *Annals of Tourism Research*, 78: 1027652, doi: 10.1016/j.annals.2019.102765.

 Invited Paper for Virtual Special Issue on Air Transport and Tourism (Journal Impact Factor = 10.4; Article Citations = 43)
- 2019 Debbage, N., and Shepherd, J. M. Urban influences on the spatiotemporal characteristics of runoff and precipitation during the 2009 Atlanta flood. *Journal of Hydrometeorology*, 20: 3–21, doi: 10.1175/JHM-D-18-0010.1.

 (Journal Impact Factor = 3.1; Article Citations = 43)

- 2018 Debbage, N., and Shepherd, J. M. The influence of urban development patterns on streamflow characteristics in the Charlanta Megaregion. *Water Resources Research*, 54(5): 3728–3747, doi: 10.1029/2017WR021594.

 (Journal Impact Factor = 5.4; Article Citations = 59)
- 2017 Debbage, N., *Miller, P., *Poore, S., *Morano, K., *Mote, T., and *Shepherd, J. M. A climatology of atmospheric river interactions with the southeastern United States Coastline. *International Journal of Climatology*, 37(11): 4077–4091, doi: 10.1002/joc.5000.

 (Journal Impact Factor = 3.6; Article Citations = 43)
- 2017 Debbage, N., Bereitschaft, B., and Shepherd, J. M. Quantifying the spatiotemporal trends of urban sprawl among large U.S. metropolitan areas via spatial metrics. *Applied Spatial Analysis and Policy*, 10(3): 317–345, doi: 10.1007/s12061-016-9190-6. (Journal Impact Factor = 2.0; Article Citations = 44)
- 2015 Debbage, N., and Shepherd, J. M. The urban heat island effect and city contiguity. *Computers, Environment and Urban Systems*, 54: 181–194, doi: 10.1016/j.compenvurbsys.2015.08.002.

 (Journal Impact Factor = 7.1; Article Citations = 408)
- 2015 Debbage, N., *McLeod, J., *Rackley, J., *Zhu, L., Mote, T., and Grundstein, A. The role of point source aerosol emissions on atmospheric convective activity in the vicinity of power plants in Georgia, USA. *Papers in Applied Geography*, 1(2): 134–142, doi: 10.1080/23754931.2015.1012430.

 (Journal Impact Factor = NA; Article Citations = 3)
- 2014 Debbage, N., *Gonsalves, N., Shepherd, J. M., and Knox, J. Superstorm Sandy and voter vulnerability in the 2012 US presidential election: A case study of New Jersey and Connecticut. *Environmental Hazards*, 13(3): 181–199, doi: 10.1080/17477891.2014.891500.

 (Journal Impact Factor = 1.7; Article Citations = 13)
- 2013 Debbage, N. Sky-view factor estimation: A case study of Athens, Georgia. *The Geographical Bulletin*, 54(1): 49–57.

 (Journal Impact Factor = NA; Article Citations = 16)

BOOK CHAPTERS

*Student Co-Author

2022 – Debbage, K., and Debbage, N. Sustainable Innovation in the Global Airline Industry, *Handbook of Innovation for Sustainable Tourism*, Booyens, I. and Brouder, P. (Eds.), Edward Elgar Publishing. (Book Chapter Citations = 1)

- 2021 Debbage, K., and Debbage, N. Air Freight Logistics, *International Encyclopedia of Transportation*, Vickerman, R. (Ed.), 361–368, UK: Elsevier. (Book Chapter Citations = 4)
- 2019 Haupt, S., Hanna, S., Askelson, M., Shepherd, J. M., *Fragomeni, M. A., Debbage, N., and *Johnson, B. 100 Years of Progress in Applied Meteorology Part II: Applications that Address Growing Populations, Chapter 23, *Meteorological Monographs, A Century of Progress in Atmospheric and Related Sciences: Celebrating the American Meteorological Society Centennial*, doi: 10.1175/AMSMONOGRAPHS-D-18-0007.1. (Book Chapter Citations = 9)

CONTRACTED REPORTS

*Student Co-Author

2024 – Debbage, N., Zhai, W., Lopez Ochoa, L., Lee, R. J., *Pineda, A., *Jones, E., *Clearwater, T., *Rueda, S., *Pursch, T., *Renteria, J., *Kenney, M. Evaluating the Urban Heat Mitigation Potential of the San Antonio Cool Pavement Pilot Program. Available Online: https://www.sa.gov/files/assets/main/v/2/sustainability/documents/shared/pavement-report.pdf

RESEARCH GRANTS/CONTRACTS

*Student Co-Author

- Submitted CO-I, Leveraging NASA data to enable a climate smart septic system hydrometeorology and environmental justice (SHADE) framework in the south-eastern U.S., NASA ROSES IDS, \$824,468 million (UTSA \$118,140).
- Submitted CO-I, *Extreme heat events at urban scales: An interdisciplinary approach*, NSF Growing Convergence Research, \$1.5 million.
- 2024 2025 CO-I, Measuring atmospheric variability to manage intra-urban heat and air quality, NSF Civic Planning Grant, \$74,493.
- 2024 2025 Senior Personnel, Create an ethical urban digital twin to co-design heat mitigations for integrated indoor and outdoor environments, NSF Civic Planning Grant, \$75,000.
- 2024 2025 PI, Continued evaluation of cool pavement as an urban heat mitigation measure, City of San Antonio, \$120,723.
- 2023 2024 PI, Evaluating the urban heat mitigation potential of the San Antonio cool pavement pilot, City of San Antonio, \$143,520.
- 2023 2024 CO-I, *Enabling informed site selection for environmental harm mitigation*, City of San Antonio, \$49,445.

- 2022 2027 CO-I, *An air quality monitoring station to expand NASA's Pandora Network to South Texas*, NASA Increasing Participation of Minority Serving Institutions in Earth Science Division Surface-Based Measurement Network's, \$590,000.
- 2020 2025 CO-I, Toward conceptualization and predictability: A multi-scalar analysis of urban-influenced hydrometeorological processes. NASA ROSES IDS, \$1.75 million (UTSA \$84,285).
- 2020 Debbage, N., *Spatiotemporal assessment of San Antonio's surface urban heat island.* UTSA INTRA Seed Grant, \$5,000.
- 2020 *Guerra, J., and Debbage, N. *Visualizing UTSA campus energy usage via GIS*. UTSA Office of Sustainability, \$3,200.
- 2019 *Guerra, J., and Debbage, N. Changes in urban land use throughout the Edwards Aquifer: A comparative analysis of Austin, San Antonio, and the I-35 Corridor. UTSA Office of Sustainability, \$1,245.
- 2017 Debbage, N., and Shepherd, J. M. *Quantifying the relative contributions of the physical mechanisms responsible for the Atlanta 2009 flood*. Georgia Water Resources Institute, \$18,000.

INVITED PRESENTATIONS

- 2023 Debbage, N. Panelist. *Green Horizon Symposium: Heat in the Heart of the City Strategies for a Cooler Urban Future*. San Antonio, Texas
- 2023 Debbage, N. San Antonio cool pavement pilot findings. *Joint UTSA and UT-Austin Urban Heat Workshop*. San Antonio, Texas.
- 2023 Debbage, N. San Antonio cool pavement pilot findings. *City of San Antonio UHI Mitigation Delivery Team*. Virtual.
- 2023 Debbage, N. San Antonio cool pavement pilot. *Urban Sustainability Directors Network*. Virtual.
- 2023 Debbage, N. San Antonio cool pavement pilot. <u>Texas Public Ratio Think Science</u>. San Antonio, Texas.
- 2023 Debbage, N. San Antonio and the urban heat island. *The Climate Initiative: San Antonio Community Conversation*. San Antonio, Texas.
- 2023 Debbage, N. Graduation ceremony speaker. *University of Geography Department of Geography Graduation Ceremony*. Virtual.

- 2023 Debbage, N. Urban climate action plans in the United States: A textual content analysis and evaluation. *UTSA Department of Political Science and Geography Speaker Series*. San Antonio, Texas.
- 2023 Debbage, N. Urban climate action plans in the United States: A textual content analysis and evaluation. *UTSA Climate Research Interest Group*. San Antonio, Texas.
- 2022 Debbage, N. Panelist. Some like it hot: Planning for the impact of extreme weather. *The Health Cell*. San Antonio, Texas.
- 2022 Debbage, N. The urban heat island effect and San Antonio. *San Antonio City Council Special Session on the City Budget*. San Antonio, Texas.
- 2022 Debbage, N. Summer heat and health in cities. <u>Texas Public Radio Think Science</u>. San Antonio, Texas.
- 2022 Debbage, N., Climate change policy: From Paris to Texas. *Climate Reality Project Texas Chapter Coalition Earth Day Celebration*. Virtual.
- 2021 Debbage, N. Panelist. Briefing on the global impact, sustainability, and U.S. policy implications of COP-26. *UTSA Department of Political Science and Geography Speaker Series*. Virtual.
- 2021 Debbage, N. Panelist. Code red texas: Climate change projections for Texas on sea level rise, hurricanes and heat waves from the 2021 IPCC Sixth Assessment Report. *UTSA NASA MIRO Center for Advanced Measurements in Extreme Environments*. Virtual.
- 2021 Debbage, N. Climate change policy: From Paris to San Antonio. *Academy of Learning in Retirement*. Virtual.
- 2021 Debbage, N. The influence of urbanization on hydrometeorology and flooding vulnerability in Charlanta. *Florida State Department of Geography Colloquium Series*. Virtual.
- 2020 Debbage, N. Urban climatological processes and their role in San Antonio. *Academy of Learning in Retirement*. Virtual.
- 2019 Debbage, N. The influence of urbanization on the hydrometeorology of the Charlanta megaregion. *UTSA Department of Geological Sciences Colloquium Series*. San Antonio, Texas.
- 2019 Debbage, N. Urban climatological processes and their role in San Antonio. *Academy of Learning in Retirement*. San Antonio, Texas.

CONFERENCE PRESENTATIONS

- 2024 Debbage, N. Panelist. Interdisciplinary work, teaching, and research in climatology. *American Association of Geographers Annual Meeting*. Honolulu, Hawaii.
- 2024 Debbage, N. Weakly forced thunderstorms in the Southeast US are stronger near urban areas. *American Association of Geographers Annual Meeting*. Honolulu, Hawaii.
- 2023 Debbage, N. Weakly forced thunderstorms in the Southeast US are stronger near urban areas. *Southwestern Division of the American Association of Geographers Annual Meeting*. Laredo, Texas.
- 2023 Debbage, N., Atasoy, M. Mitra, C., and Byahut, S. Urban climate action plans in the United States: A textual content analysis and evaluation. *American Association of Geographers Annual Meeting*. Denver, Colorado.
- 2019 Debbage, N., and Debbage, K. Aviation carbon emissions, route choice and tourist destinations: Are non-stop routes a remedy? *Southeastern Division of the American Association of Geographers Annual Meeting*. Wilmington, North Carolina.
- 2019 Debbage, N. Multiscalar spatial analysis of urban flood risk and environmental justice in the Charlanta Megaregion, USA. *Southwestern Division of the American Association of Geographers Annual Meeting*. Fort–Worth, Texas.
- 2019 Debbage, N., and Debbage, K. Aviation carbon emissions, route choice and tourist destinations: Are non-stop routes a remedy? *American Association of Geographers Annual Meeting*. Washington, D.C.
- 2019 Debbage, N. Multiscalar Assessment of Flood Zone Occupation and Environmental Justice: A Case Study of the Charlanta Megaregion. *American Meteorological Society Annual Meeting*. Phoenix, Arizona.
- 2018 Debbage, N. Multiscalar Assessment of Flood Zone Occupation and Environmental Justice: A Case Study of the Charlanta Megaregion. *Race, Ethnicity & Place Conference*. Austin, Texas.
- 2018 Debbage, N., and Shepherd, J. M. Flood hazards and environmental justice in the Charlanta megaregion. *American Association of Geographers Annual Meeting*. New Orleans, Louisiana.
- 2018 Debbage, N., and Shepherd, J. M. Quantifying the relative contributions of the physical mechanisms responsible for the Atlanta 2009 flood. *American Meteorological Society Annual Meeting*. Austin, Texas.

- 2017 Debbage, N., and Shepherd, J. M. Quantifying the relative contributions of the physical mechanisms responsible for the Atlanta 2009 flood. *Southeastern Division of the American Association of Geographers Annual Meeting*. Starkville, Mississippi.
- 2017 Debbage, N. The influence of urban development patterns on streamflow characteristics: A case study of the Charlanta megaregion. Student Poster Session. *Chattahoochee Riverkeeper Climate Change Conference*. Atlanta, Georgia.
- 2017 Debbage, N. The influence of urban development patterns on streamflow characteristics. *American Association of Geographers Annual Meeting*. Boston, Massachusetts.
- 2017 Debbage, N., and Shepherd, J. M. The influence of urban development patterns on streamflow characteristics. *American Meteorological Society Annual Meeting*. Seattle, Washington
- 2016 Debbage, N., Miller, P., Poore, S., Morano, K., Mote, T., and Shepherd, J. M. A climatology of atmospheric river interactions with the southeastern United States. *Southeastern Division of the American Association of Geographers Annual Meeting*. Columbia, South Carolina.
- 2016 Debbage, N., Bereitschaft, B., and Shepherd, J. M. Sensitivity of spatial metrics to land use classification scheme when assessing urban sprawl among large U.S. metropolitan areas. GISS Specialty Group Honors Student Paper Competition Session. *American Association of Geographers Annual Meeting*. San Francisco, California.
- 2016 Debbage, N. Spatiotemporal analysis of segregation within major US metropolitan areas utilizing landscape metrics. *UGA Geography Graduate Research Symposium*. Athens, Georgia.
- 2015 Debbage, N., Gonsalves, N., Shepherd, J. M., and Knox, J. Superstorm Sandy and voter vulnerability in the 2012 US presidential election. *American Association of Geographers Annual Meeting*. Chicago, Illinois.
- 2015 Debbage, N., Gonsalves, N., Shepherd, J. M., and Knox, J. Superstorm Sandy and voter vulnerability in the 2012 US presidential election. *UGA Geography Graduate Research Symposium*. Athens, Georgia.
- 2014 Debbage, N. The urban heat island effect and city contiguity. Graduate Student Honors Paper Session. *Southeastern Division of the American Association of Geographers Annual Meeting*. Athens, Georgia.
- 2014 Debbage, N., McLeod, J., Rackley, J., Zhu, L., Mote, T., and Grundstein, A. The role of point source aerosol emissions on atmospheric convective activity in the vicinity of power plants in Georgia, USA. *Applied Geography Conference*. Atlanta, Georgia.

- 2014 Debbage, N., and Shepherd, J. M. Urban heat/dry islands: The role of density and spatial contiguity. *American Association of Geographers Annual Meeting*. Tampa Bay, Florida.
- 2014 Debbage, N., and Shepherd, J. M. Quantifying urban form via spatial metrics and its climatic implications. *American Meteorological Society Annual Meeting*. Atlanta, Georgia.
- 2014 Debbage, N., Gonsalves, N., Shepherd, J. M., and Knox, J. Superstorm Sandy and voter vulnerability in the 2012 US presidential election. Poster Session. *American Meteorological Society Annual Meeting*. Atlanta, Georgia.
- 2013 Debbage, N. Urban heat island and urban dry island analysis of the 50 largest metropolitan statistical areas. Graduate Student Honors Paper Session. *Southeastern Division of the American Association of Geographers Annual Meeting*. Roanoke, Virginia.
- 2012 Debbage, N. Sky-view factor estimation: A case study of Athens, Georgia. *UGA Undergraduate Geography Conference*. Athens, Georgia.
- 2011 Debbage, N. Sky-view factor estimation: A case study of Athens, Georgia. *Southeastern Division of the American Association of Geographers Annual Meeting*. Savannah, Georgia.
- 2011 Debbage, N., and Spear, T. Railroad accessibility for southeastern states: A matrix analysis. Poster Session. *UGA Undergraduate Geography Conference*. Athens, Georgia.

COURSES TAUGHT

*Both online and face-to-face versions offered

The University of Texas at San Antonio

Undergraduate: GES 2613 – Introduction to Physical Geography (1 section)

GES 3314 – Introduction to Geographic Information Systems (6 sections) *

GES 3323 – Spatial Analysis (5 sections) *

GES 3713 – Weather and Climate (6 sections) *

GES 3753 – Climate Change (4 sections) *

GES 4913 – Independent Study (2 sections)

GES 4983 – Research Practicum (1 section)

Graduate: GRG 5003 – Research Design and Spatial Analysis – cross listed with Spatial Analysis (5 sections) *

GRG 5413 – Climatology – cross listed with Climate Change (4 sections) *

GRG 6951 – Independent Study (1 section)

GRG 6953 – Independent Study (3 sections)

GRG 6963 – Internship (2 sections)

GRG 6983 – Master's Thesis (7 sections)

GEO 6983 – Master's Thesis (2 sections)

Guest Lecture: GRG 5013 – Geographic Thought

<u>University of Georgia</u>

Undergraduate: GEOG 1112L – Introduction to Weather and Climate Laboratory (8 sections)

GEOG 1112 – Introduction to Weather and Climate (1 section)

Graduate: GRSC 7770 – Teaching Seminar for Geography Graduate Teaching

Assistants (2 sections)

Guest lecture: GEOG 2011 - Introduction to GIScience

STUDENT MENTORING

Thesis Chair

2024 - Present – Thomas Richardson (M.A. Geography)

- 2024 Tabytha Clearwater "Assessing climate change vulnerability in Rio Grande indigenous reservation communities" (M.A. Geography)
- 2023 Alex Herrejon, "Proximity of concrete batch plants to marginalized communities in Chicago, Illinois" (M.A. Geography)
- 2021 Glenn Porritt, "Assessing drought trends within the Aransas National Wildlife Refuge" (M.S. Geoinformatics)
- 2021 Zane Nordquist, "Changes in the future statistical properties of temperature and heatwaves in Texas due to climate change" (M.A. Geography)
- 2021 Angelina Dumlao, "Examining potential inequities in the spatial distribution of Texas Triangle cooling centers" (M.A. Geography)

Thesis Committee Member

2023 - Present – Ryan Anhold (M.A. Global Affairs)

- 2024 Donald Leisure (M.S. Geography University of Alabama)
- 2023 Blaine Underwood (M.A. Global Affairs)
- 2022 Joshua Yates (M.A. Geography)
- 2021 Jamie Gillis (M.A. Geography)
- 2020 Samantha Rodriquez (M.A. Geography)

Dissertation Committee Member

2024 - Present – Haoming Qin (Ph.D. Civil Engineering)

2024 - Present – Christian Sustayta (Ph.D. Civil Engineering)

2023 - Present – Subhasis Ghosh (Ph.D. Earth System Science – Auburn University)

Non-Thesis Masters Chair

2022 – Christina LaPoint

Non-Thesis Masters Committee Member

2024 – Alexis Arguijo

2023 – Tomas Fernandez

2022 – Robert Williams

2021 – Brandon Stark

2021 – David Westphall

2021 – Michael Powell

<u>Teaching and Research Assistants</u>

2024 – Tucker Curry (NASA IDS Grant RA)

2024 – Tabytha Clearwater (Spatial Analysis TA)

2022 - 2023 – Alex Herrejon (Introduction to GIS and Spatial Analysis TA)

2022 – Joshua Yates (Spatial Analysis TA)

2021 – Zane Nordquist (UTSA Internal Research Award RA)

2021 – Jewel Uzquiano (NASA IDS Grant RA)

2021 – Angelina Dumlao (Spatial Analysis TA)

2020 – David Westphall (Spatial Analysis TA)

2020 – Eli Vela (Introduction to GIS Lab TA)

2018 - 2021 – Christina LaPoint (Introduction to GIS Lab TA)

<u>Undergraduate</u>

2023 – Tyler Pursch (COLFA Undergraduate Research Conference Advisor)

2022 – Erika Dyér (NASA MIRO CAMEE Summer Intern)

- 2022 Jules Pavliska (COLFA Undergraduate Research Conference Advisor)
- 2021 Amber Powell (Undergraduate Independent Study Advisor)
- 2020 Jewel Uzquiano (COLFA Undergraduate Research Conference Advisor)
- 2019 Justin Guerra (Undergraduate Research Practicum Advisor)

AWARDS

- 2022 University of Texas San Antonio College of Liberal and Fine Arts Stumberg Assistant Professor Researcher of the Year, \$1,000
- 2018 First place in the Population Specialty Group student paper competition at the American Association of Geographers Annual Meeting, \$300
- 2017 Second place in the Climate Specialty Group student paper competition at the American Association of Geographers Annual Meeting, \$175
- 2016 Second place in the GISS Specialty Group honors student paper competition at the American Association of Geographers Annual Meeting, \$750
- 2014 Third place in the Climate Specialty Group student paper competition at the American Association of Geographers Annual Meeting, \$100
- 2012 NCGE/AAG Excellence of Scholarship Award, \$250
- 2012 First place in the University of Georgia Undergraduate Geography Conference paper competition, \$100
- 2011 Runner-up in the University of Georgia Undergraduate Geography Conference poster competition, \$50

HONORS

- 2021 Early Career Research Fellow UTSA NASA MIRO CAMEE
- 2016 University of Georgia Outstanding Graduate Teaching Assistant
- 2015 Department of Geography Outstanding Graduate Teaching Assistant
- 2012 First Honor Graduate: Maintained a 4.0 GPA every semester
- 2012 Summa Cum Laude Graduate

- 2012 Inducted in Phi Beta Kappa Honor Society
- 2010 Inducted in Gamma Theta Upsilon International Geographical Honor Society
- 2009 Inducted in Golden Key International Honor Society
- 2009 Inducted in Alpha Lambda Delta National Honor Society
- 2008–2010 Presidential Scholar: Maintained a 4.0 while enrolled in at least 14 credit hours

SERVICE ACTIVITIES

<u>Department</u>

- 2023 Present Geography and Environmental Sustainability Program Coordinator
- 2023 Present APCC (member)
- 2021 Present Committee on Research (Chair)
- 2020 Present Scholarship Review Committee (Member)
- 2020 Present Geoinformatics Admissions Committee (Member)
- 2020 Present Geoinformatics Graduate Committee (Member)
- 2019 Present Co-creator of Critical GIS Certificate Program
- 2019 Present Speaker Series Subcommittee (Member)
- 2019 Present Departmental Faculty Library Liaison
- 2018 Present Faculty Advisor for the Eta Beta Chapter of the Gama Theta Epsilon International Geographical Honor Society
- 2018 Present Geography Graduate Applications Committee (Member)
- 2018 Present Participated in Major recruitment for the Geography and Environmental Sustainability Program at numerous events (e.g., Roadrunner Days, Fall into Your Major, Departmental Mixer, UTSA Day, and UTSA-ISA event)
- 2018 Present Department Faculty Advisory Committee (Member)
- 2022 2023 Earth Systems Modeling (Department of Earth and Planetary Sciences) Job Search Committee Member
- 2020 Interim Geography Graduate Program Coordinator

- 2019 2020 Committee on Research (Member)
- 2019 2020 Research Methods in Political Science and Global Affairs Job Search Committee Member
- 2015 Faculty Representative, UGA Geography Graduate Student Association
- 2014 Colloquium Representative, UGA Geography Graduate Student Association
- 2013 2014 Judge, UGA Undergraduate Geography Conference
- 2013 Co-Chair, UGA AMS Chapter Career Fair Committee
- 2012 President, Gamma Nu Chapter of the Gamma Theta Upsilon International Geographical Honor Society

College

- 2021 Present Committee for Research and Creative Activities (Member)
- 2019 Present Judge for the College of Liberal and Fine Arts Student Conference

University

- 2022 Present Faculty Senator for the Department of Political Science and Geography
- 2022 Present Handbook of Operating Procedures Faculty Senate Committee
- 2020 New Faculty Peer Mentoring Team Leader

Discipline

- 2023 NSF Ad-Hoc Reviewer for HEGS CAREER Proposal
- 2022 NSF Ad-Hoc Reviewer for Physical and Dynamic Meteorology Program
- 2021 NSF Review Panelist for Harnessing the Data Revolution Solicitation
- 2020 NSF Ad-Hoc Reviewer for Hydrological Sciences Program
- 2019 Chair, Optimization of the Urban, Rural and Liminal. Paper Session. *Southeastern Division of the American Association of Geographers Annual Meeting*
- 2019 Organizer and Chair, Sustainable Transportation Systems: The Key Environmental Issues Paper Session. *American Association of Geographers Annual Meeting*
- 2018 Co-Chair, Local and Regional Response in the Water Cycle Due to Urbanization Poster and Paper Sessions. *American Meteorological Society Annual Meeting*

- 2017 Chair, Sustainable Cities Paper Session. *American Association of Geographers Annual Meeting*
- 2015 Organizer and Chair, Superstorm Sandy: Hazards, Vulnerabilities & Impacts Paper Session. *American Association of Geographers Annual Meeting*
- 2011 Chair, Applications of GIS and Remote Sensing Paper Session. Southeastern Division of the American Association of Geographers Annual Meeting

Journal Manuscripts Reviewed:

Urban Climate (8; Outstanding Reviewer Recognition), Journal of Applied Meteorology and Climatology (4), Landscape and Urban Planning (4), International Journal of Climatology (3), Sustainable Cities and Society (3), International Journal of Applied Earth Observations and Geoinformation (2), Atmosphere (2), Environment and Planning B (2), Journal of Geophysical Research – Atmospheres (2), Bulletin of the American Meteorological Society (1), Geophysical Research Letters (1), Water Resources Research (1), Hydrological Processes (1), Weather, Climate and Society (1), PLOS One (1), Journal of Hydrology (1), Monthly Weather Review (1), Remote Sensing of Environment (1), Environmental Hazards (1), Natural Hazards (1), Electoral Studies (1), International Journal of Sustainable Development and Planning (1), Water (1), Advances in Atmospheric Sciences (1), and Asian Social Science (1)

Community

- 2020 Present Selected by the San Antonio City Council to serve on the Technical and Community Advisory Committee tasked with implemented the city's Climate Action and Adaptation Plan
- 2019 Provided written feedback on San Antonio's Climate Action and Adaptation Plan

MEDIA CONTRIBUTIONS

- 2024 Findings from UTSA cool pavement pilot report featured in <u>NBC-San Antonio</u> and <u>Smart Cities Dive</u>
- 2023 Interview with AccuWeather discussing the San Antonio cool pavement pilot
- 2023 Interview with Texas Monthly discussing the San Antonio cool pavement pilot
- 2023 San Antonio cool pavement pilot study featured in <u>Government Technology</u>, <u>Axios</u>, <u>San Antonio Express News</u>, <u>COSA TV</u>, <u>CBS-San Antonio</u>, <u>The Globe and Mail</u>, and <u>ABC-San Antonio</u>
- 2023 Urban rainfall effect study featured in UTSA Sombrilla Magazine
- 2022 Urban rainfall effect rankings discussed in the New Orleans Advocate

- 2022 Interview with <u>AccuWeather</u> on urban rainfall effect study
- 2022 Research on the urban rainfall effect discussed in <u>UTSA Today</u>
- 2021 Interview with the <u>City of San Antonio Office of Sustainability</u> blog on youth engagement and climate action.
- 2021 Research on traffic congestion and urban form featured in UTSA Today
- 2021 Study on Atlanta flooding was highlighted in Science News for Students
- 2021 Research on Edwards Aquifer land use change highlighted in <u>UTSA Today</u>
- 2021 Urban heat island research included in New York Times article on urban trees
- 2021 Urban heat island study mentioned in <u>E&E News</u> story on Miami appointing a Chief Heat Officer
- 2021 Flooding and environmental justice work discussed in Forbes
- 2021 <u>UTSA Today</u> article highlighting my appointment to the SA CAAP Community and Technical Advisory Committee
- 2020 Research on airline carbon emissions showcased in <u>UNCG Research Magazine</u>
- 2020 Research on election turnout and weather discussed in Forbes
- 2020 Research featured in the Climate Project documentary on climate justice which aired on NBC-Boston
- 2020 Study on the urban heat island effect highlighted in <u>Forbes</u> article on urban heat and red lining
- 2020 Interview with <u>ABC-San Antonio</u> as part of their "KSAT Explains" episode on climate change policy
- 2020 Interview with <u>NBC-Boston</u> on urban flood risk inequities and climate change.
- 2020 "San Antonio's COVID-19 Cases Show a Tale of 2 Cities, But That Could Change" Commentary in the <u>Rivard Report</u> (also featured in <u>UTSA Today</u>)
- 2020 <u>Weather Channel</u> interview for their show "2020 Race to Save the Planet: Environmental Justice" which featured presidential candidates
- 2019 Science Daily story on aviation carbon emissions research

- 2019 ABC-San Antonio interview on the importance of traditional maps in the digital GPS age
- 2019 <u>UTSA Today</u> interview on urban climatology research
- 2019 Forbes article that discusses my urban heat island research
- 2018 Forbes article that discusses urban streamflow research
- 2017 WUGA radio interview on Southeastern atmospheric river research
- 2017 <u>UGA Today</u> story on Southeastern atmospheric river research
- 2016 Provided information on the strategies cities are utilizing to combat rising urban temperatures to New York Magazine
- 2015 Next City interview on urban heat island effect research
- 2015 Atlanta NPR (WABE) radio interview on urban heat island effect research
- 2015 UGA Today story on urban heat island effect research
- 2015 Provided a summary report of the urban heat island effect in Minneapolis-St. Paul to help inform pollution modelling efforts at the Minnesota Pollution Control Agency
- 2014 Reviewed and provided feedback on <u>Climate Central's</u> report, "Summer in the City: Hot and Getting Hotter"
- 2014 Provided information on how urban environments influence and are impacted by climate change for the Georgia Initiative for Climate and Society's website
- 2013 Provided a report documenting the intensity of the Phoenix, Arizona urban heat/dry island effects to the <u>BBC Two Cloud Lab Series</u> and advised on how these phenomena could be evaluated using the project's airship

ASSISTANTSHIPS AND SCHOLARSHIPS

- 2014 2017 University of Georgia Teaching Assistantship, \$16,452 per year
- 2012 2014 University of Georgia Graduate School Assistantship, \$15,380 per year
- 2012 Community Foundation for Greater Atlanta Lieutenant Joel Hirsch Goldberg Scholarship, \$2,754
- 2010 University of Georgia Department of Geography Merle C. Prunty Scholarship, \$1,000
- 2008 2012 University Charter Scholarship and Regent Waiver, \$70,000 total

MEMBERSHIPS

American Association of Geographers (AAG)

American Meteorological Society (AMS)

International Association for Urban Climate (IAUC)

REFERENCES

Dr. J. Marshall Shepherd, Georgia Athletic Association Distinguished Professor, Department of Geography, University of Georgia (marshgeo@uga.edu)

Dr. Richard Jones, Professor Emeritus, Department of Political Science and Geography, The University of Texas at San Antonio (richard.jones@utsa.edu)

Dr. Jon Taylor, Professor & Chair, Department of Political Science and Geography, The University of Texas at San Antonio (jon.taylor@utsa.edu)