

Anuska Narayanan
Department of Geography
University of Florida
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EDUCATION

- Ph.D. Geography, *Sustainability & Global Environmental Change*
Dissertation Topic: Extreme Heat and Human Mortality in the U.S.
University of Florida, Expected Completion August 2026
- M.S. Geography, *Geographic Information Science*
Thesis: "Sediment Response to Deforestation in the Amazon River Basin"
University of Alabama, August 2022
- B.S. Environmental Science
University of Alabama, Spring 2020
- B.A. Foreign Languages and Literature, *Italian*
University of Alabama, Spring 2020

PROFESSIONAL AND RESEARCH EXPERIENCE

- Graduate Research Assistant August 2022-Present
Department of Geography,
The University of Florida
- Geographic Information Systems Intern May 2021- April 2022
Spire Energy,
605 Richard Arrington Jr. Blvd. North,
Birmingham, Alabama, 35203
- Field Technician Summer 2020
Forest Dynamics Lab
Department of Geography,
The University of Alabama

FUNDING AWARDS

Top Published Student Research Article in "Sustainability and Global Environmental Change" (\$1000)	April 2025, 2026
Evan Coe Award in Medical Geography (\$2,000) Department of Geography, University of Florida	April 2023, 2024, 2025
William A. Fischer Memorial Scholarship (\$2,000) American Society for Photogrammetry and Remote Sensing (ASPRS)	February 2023
David C. Weaver Memorial Award (\$1,000) Department of Geography, University of Alabama,	March 2022
American Geophysical Union (AGU) Travel Grant (\$1,000) Frontiers in Hydrology, American Geophysical Union San Juan, Puerto Rico	June 2022
CSDMS 2022 Annual Meeting Travel Scholarship Community Surface Dynamics Modeling System, The University of Colorado, Boulder, CO	May 2022
Conference Travel Grant (\$1,000) The University of Alabama, Tuscaloosa, AL	Fall 2021, Spring 2022
Education Abroad Grant (\$1,000) The University of Alabama, Tuscaloosa, AL	Spring 2018

PUBLICATIONS

Narayanan, A., Rezaali, M., Keellings, D., and Lopez-Quintero, C. Triple Jeopardy: Trends in the Co-Occurrence of Extreme Heat, Drought, and PM2.5 across the Conterminous United States. *In prep.*

Narayanan, A., Keellings, D., and Lopez-Quintero, C. Social and Structural Vulnerabilities as Primary Determinants of Heat-Related Mortality in the U.S. *In Review at Environmental Research: Climate.*

Narayanan A & Keellings D. Rise in heat related mortality in the United States. *PLOS Climate.* 2025;4: e0000610. doi:10.1371/journal.pclm.0000610

Narayanan, A., Rezaali, M., Bunting, E. L., & Keellings, D. (2025). It's getting hot in here: Spatial impact of humidity on heat wave severity in the U.S. *Sci. Total Environ.*, 963, 178397. <https://doi.org/10.1016/j.scitotenv.2025.178397>

Narayanan, A., Cohen, S., & Gardner, J.R. (2024). Riverine sediment response to deforestation in the Amazon basin, *Earth Surf. Dynam.*, 12, 581–599, <https://doi.org/10.5194/esurf-12-581-2024>.

Narayanan, A., Peter, B., & Keellings, D. (2023). A Combined Climate Extremes Resilience Index for the Contiguous United States. *Weather Climate and Society*. <https://doi.org/10.1175/WCAS-D-23-0008.1>

Moragoda, N., Cohen, S., Gardner, J. R., Muñoz, D., **Narayanan, A.**, Moftakhari, H. R., & Pavelsky, T. M. (2023). Modeling and Analysis of Sediment Trapping Efficiency of Large Dams using Remote Sensing. *Water Resources Research*. <https://doi.org/10.1029/2022WR033296>.

Cohen, S., Peter, B. G., Haag, A., Munasinghe, D., Moragoda, N., **Narayanan, A.**, & May, S. (2022). Sensitivity of Remote Sensing Floodwater Depth Calculation to Boundary Filtering and Digital Elevation Model Selections. In *Remote Sensing* (Vol. 14, Issue 21, p. 5313). MDPI AG. <https://doi.org/10.3390/rs14215313>

Goode, J.D, **Narayanan, A.**, Phillips, D. L., Hart, J. L., Torreano, S. J., & Dey, D. C. (2022). *Intermediate-severity disturbance impacts in a mixedwood forest: A multi-scale analysis*. In *Forest Ecology and Management* (Vol. 526, p. 120582). Elsevier BV. <https://doi.org/10.1016/j.foreco.2022.120582>

CONFERENCES PRESENTATIONS

Narayanan, A., Keellings, D. (2024, December) Rise in Heat Related Mortality in the U.S, American Geophysical Union Fall Meeting, Washington D.C.

Narayanan, A., Rezaali, M., & Keellings, D. (2024, March) Incorporating a Humidity Component into the Heat Severity and Coverage Index. Poster Presentation. American Association for Geographers, Honolulu, Hawaii.

Narayanan, A., Keellings, D. (2023, December) *Concurrence of Heatwaves and Droughts in the Conterminous United States*. Poster Presentation. American Geophysical Union Fall Meeting, San Francisco, California.

Narayanan, A., Peter, B., Keellings, D. (2022, November) *Developing a Combined Climate Extremes Resilience Index for the Conterminous United States*. Paper Presentation. Southeastern Division of American Association of Geographers (SEDAAG), Atlanta, Georgia.

Cohen, S., Peter, B., Munasinghe, D., Moragoda, N.P., **Narayanan, A.**, A.A., May., S. (2022, June) *Beyond Flood Extent: Augmenting (Remote Sensing) Flood Maps with the new Floodwater Depth Estimation Tool (FwDET 2.1)* Poster Presentation. *Frontiers in Hydrology 2022*, San Juan, Puerto Rico.

Narayanan, A., Williams, S., Bates, B. (2022, June) *Land Cover Optimization of the Synthetic Stage-Discharge Rating Curve*. Poster Presentation. Frontiers in Hydrology 2022, San Juan, Puerto Rico.

Narayanan, A. & Cohen, S. (2022, May) *Sediment Response to Deforestation in the Amazon River Basin*. Poster Presentation. Community Surface Dynamics Modeling System Annual Meeting 2022, Boulder, Colorado.

Narayanan, A., Larson, R., Faivre, C., Alam S., Keellings D. (2021, September) *Developing a Combined Climate Extremes Resilience Index: A Case Study on the State of Alabama*. Poster Presentation. Alabama Water Resources Conference, Orange Beach, Alabama.

TEACHING EXPERIENCE

Guest Lecturer, <i>Climate Change and Health, Extreme Heat and Human Health,</i> Department of Geography, The University of Florida	October 2024
Grader, GEO 3502: <i>Economic Geography</i> Department of Geography, The University of Florida	Summer 2024
Instructor, ENC 3246: <i>Professional Communications for Engineers</i> University Writing Program, The University of Florida	Spring 2024, Fall 2024
Instructor, ENC 1101: <i>Argumentative and Expository Writing</i> University Writing Program, The University of Florida	Fall 2023
Instructor, GEO 2006: <i>Natural Hazards</i> Department of Geography, The University of Florida	Summer 2023, 2024
Guest Lecturer, <i>Environmental Remote Sensing, Heatwaves and Droughts in Google Earth Engine,</i> Department of Geography, The University of Florida	March 2023
Teaching Assistant, GY 101: <i>Atmospheric Processes and Patterns</i> Department of Geography, The University of Alabama	Fall 2020 – June 2022
Guest Lecturer, Introduction to GIS, <i>Introduction to ArcGIS Online</i> Department of Geography, The University of Alabama	October 2021

PROFESSIONAL MEMBERSHIPS

American Society for Photogrammetry and Remote Sensing	2022-Present
American Meteorological Society	October 2025-Present
European Geophysical Union	January 2022– Present
American Geophysical Union	August 2021 – Present
Forest Stewards Guild	August 2018 – August 2022

PROFESSIONAL SERVICE

Panelist for Undergraduate Research Webinar University of Alabama	15 September 2022
Undergraduate Research & Creative Activity (URCA) Conference Judge	2021, 2022
Educational Outreach: Project Learning Tree Woodland Forest Elementary, Tuscaloosa AL	2019, 2021
Educational Outreach: BRIGHT Mentor & Facilitator Crestmont Elementary School, Northport, AL Central Elementary School, Tuscaloosa, AL	2017-2019

PEER REVIEW JOURNAL CONTRIBUTIONS

Applied Geography
Hong Kong Medical Journal
Hydrology and Earth System Sciences

PROFESSIONAL TRAINING

Graduate Certificate in Public Health The University of Florida	Spring 2026
Certificate in Global Studies The University of Alabama	Fall 2021