

## University of North Carolina, Chapel Hill Department of Geography

Southeast Regional Climate Center

Albert and Gladys Coates Building CB 3220

Chapel Hill, NC 27599-3220

301-943-7066

jmccard@email.unc.edu

## EDUCATION

### Ph.D. Student, Department of Geography

UNC Chapel Hill

**Advisor:** Dr. Charles Konrad

*Expected May 2025*

*Chapel Hill, NC*

### M.A. Geography

UNC Chapel Hill

**Advisor:** Dr. Charles Konrad

*Dec 2021*

*Chapel Hill, NC*

**Thesis Title:** Trends in Recovery Aid Concentration after Hurricane Florence in North Carolina

### B.A. Environmental Studies

Davidson College

**Advisor:** Dr. Fuji Lozada

*June 2019*

*Davidson, NC*

**Thesis Title:** Flooding and Floodplain Management as Part of the Waterscape: Flows of Water and Power in Charlotte, North Carolina

**Minor:** Data Science

## CURRENT POSITIONS

### Graduate Research Consultant

The Blue Planet: Earth Systems - Dr. Erica Wise

*Spring 2023*

*UNC Chapel Hill*

### Data Verification Specialist

Odum Institute

*Summer 2022 - present*

*UNC Chapel Hill*

### Graduate Research Assistant

Southeast Regional Climate Center

*Summer 2022, Fall 2022*

*UNC Chapel Hill*

## TEACHING EXPERIENCE

### Introduction to Geographic Information

Teaching Assistant - Dr. Javier Arce-Nazario

*Spring 2023*

### Environmental Conservation and Global Change

Teaching Assistant - Dr. Aaron Moody

*Spring 2022*

### Introduction to Spatial Data Science

Teaching Assistant - Dr. Paul Delamater

*Fall 2021*

## AWARDS AND HONORS

**Honorable Mention, Graduate Research Fellowship Program, National Science Foundation**

*2022*

**Phi Beta Kappa, Davidson College**

*2019*

**Environmental Studies Outstanding Senior Award, Davidson College**

*2019*

## GRANTS AND FELLOWSHIPS

**Summer Research Grant, UNC Chapel Hill , \$1500**

*2021*

**Graduate Merit Fellow, UNC Chapel Hill, \$20,000**

*2020-2021*

**Weiss Urban Livability Fellow, UNC Chapel Hill , \$4,000**

*2020-2021*

**Conference Travel Grant, Davidson College, \$2,000**

*2019*

**Duke Endowment Resiliency Grant, Davidson College, \$500**

*2019*

**Summer Internship Grant, Davidson College, \$800**

*2019*

## RESEARCH INTERESTS

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Disasters - Extreme events; Social vulnerability; FEMA; Federal recovery aid  
Geographic Information Science (GIS)

## RESEARCH

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### Peer Reviewed

- Cardwell, J.** (2022). Community perceptions of a floodplain buyout program in Charlotte, North Carolina. *Natural Hazards*, 1-20.
- Cardwell, J.** (2022). Disruption to EMS Service During Flood Scenarios in Western North Carolina. *Journal of Rural Social Science*, 46, 6.
- Cardwell, J.** & Cowan, K. (2022). Local News Sentiment Towards FEMA Recovery Efforts after Hurricane Florence in North Carolina. *Disasters*,
- Cardwell, J.** (2022). Examining the shifting role of the human in disaster studies. *Journal of the Bulgarian Geographical Society*, 46, 51-55.
- Cardwell, J.** & Konrad, C. E. (2022). Trends in recovery aid concentration following Hurricane Florence in North Carolina: exploring the role of physical damage, community vulnerability, and Hurricane Matthew. *Environmental Hazards*, 1-23.
- Cardwell, J.** (2022). Examining the shifting role of the human in disaster studies. *Journal of the Bulgarian Geographical Society*, 46, 51-55.
- Cardwell, J.** (2021). Trends in Flood Insurance Behavior Following Hurricanes in North Carolina. *North Carolina Geographer*, 20, 2-12.

### Publications Under Review

### Other Publications

Martin, A., **Cardwell, J.**, Mundt, J., Kramer, R., Beckham, T. 2019. North Carolina Climate Risk Assessment and Resilience Plan, Chapter 4: Climate Justice, State of North Carolina

## CONFERENCES AND TALKS

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*Trends in Recovery Aid Concentration in North Carolina Following Hurricane Florence.* Presented at the 2022 Annual Meeting of the American Association of Geographers. Feb 2022. Virtual

*Trends in NFIP (National Flood Insurance Program) Participation after Major Hurricanes in North Carolina.* Presented at the 2021 Annual Meeting of the North Carolina Geographical Society. 12 March 2021. Virtual

*Flooding and Floodplain Management as Part of the Waterscape: Flows of Water and Power in Charlotte, North Carolina.* Presented at Verna Miller Case Research and Creative Works Symposium. 7 May 2019. Davidson, North Carolina.

*The Farmers' Market and the Local Economy: Testing this Relationship in the Town of Davidson, NC.* Presented at Verna Miller Case Research and Creative Works Symposium. 7 May 2019. Davidson, North Carolina

*Measuring Flood Risk: Normalizing Inequality in Charlotte, NC.* Presented at 79th Annual Meeting of the Society for Applied Anthropology, 19-23 March 2019. Portland, Oregon.

## ADDITIONAL WORK EXPERIENCE

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<b>Data-Driven EnviroLab, Department of Public Policy</b> , UNC Chapel Hill	<i>2021</i>
Graduate Research Assistant	
<b>North Carolina Department of Environmental Quality</b> , Raleigh NC	<i>2019-2020</i>
Program Coordinator	
<b>Davidson Lands Conservatory</b> , Davidson NC	<i>2019</i>
GIS Analyst	
<b>Jay Hurt Hub for Entrepreneurship</b> , Davidson College, Davidson NC	<i>2019</i>
Data Analyticz Consultant	

## UNIVERSITY SERVICE

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<b>Co-President</b> , Graduate Association of Geography Students, UNC-CH	<i>2022-2023</i>
<b>Graduate Student Representative</b> , Geography Department Graduate Committee, UNC-CH	<i>2020-2022</i>

## AFFILIATIONS

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American Association of Geographers  
North Carolina Geographical Society

## PROGRAMMING SKILLS

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**Languages:** Python, R, VB.NET, JavaScript

**Technologies:** ArcMap, ArcGIS Pro, ArcGIS Online, QGIS, Google Earth Engine, ENVI, SPSS