

DEVON V. MALONEY

Teaching Fellow, Research Assistant
CURRICULUM VITAE

University of North Carolina, Chapel Hill
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INTERESTS & EXPERIENCE

Remote sensing of land-use/land-cover, big data and machine learning of remote sensing imagery, political ecology of borders, borderlands, territory, and human-environment interaction.

EDUCATION

- 2019 – current PhD Candidate in Geography, ABD
University of North Carolina, Chapel Hill
Committee: Drs. Aaron Moody (chair), Conghe Song, Christian Lentz, Sara Smith, and Colin T. West
- 2014 – 2018 BSc in Geography (Honors)
University of St Andrews, United Kingdom
Dissertation: “Fractured Landscapes: Modeling for Increased Connectivity of Euphydryas phaeton Conservation Design” (First Class Mark)
Advisors: Drs. Jed Long and Urška Demšar
- 2014 Permaculture Design Certificate, Green Apprenticeship Program
Center for Creative Ecology, Kibbutz Lotan, Israel

EMPLOYMENT

- 2018 – 2019 Faculty Research Assistant
vanEnglesdorp Bee Lab
Entomology Department, University of Maryland, College Park
- 2016 & 2017 Summer Undergraduate Research Assistant
vanEnglesdorp Bee Lab
Entomology Department, University of Maryland, College Park
- 2015 Political and Economic Section Summer Intern
U.S. Embassy, Department of State
Brussels, Belgium
- 2014 Community Liaison Summer Intern
U.S. Embassy, Department of State
Brussels, Belgium
- 2013 – 2014 Corporate Communications and Social Media Assistant
European Young Innovators Forum
Brussel, Belgium
- 2012 Public and Governmental Affairs Summer Intern
U.S. Coast Guard
Washington, DC

PUBLICATIONS

4. West, C.T., Saparapa, R., Nomedji, K., Maloney, D. and Moody, A. (2022) “Protocols for Conducting Drone Fieldwork in Togo, West Africa.” *Annals of Anthropological Practice*, 46 (2), 170-181.

In review, revision, or preparation:

3. Maloney, D., West, C.T., Rojas, A., and Moody, A. "Detecting Fine Resolution Soil Degradation and Restoration in Northern Togo using Drone Remote Sensing." *African Geographical Review*. (submitted, under review)
2. Maloney, D., West, C.T., Rojas, A., and Moody, A. "Imaging degradation: understanding fine-scale signals drone remote sensing signals of land degradation and rehabilitation in West African drylands" (in preparation)
1. Maloney, D., West, C.T., and Moody, A. "Land-use and land-cover change drivers of browning and greening dynamics in Burkina Faso 2000-2018" (in preparation)

RESEARCH SKILLS

Field locations:	Mexico, Togo, Iceland, United Kingdom, United States (TX, TN, MD, NC)
Field Skills:	Drone remote sensing, vegetation surveying
Analytic Skills:	Spectral indexes, georeferencing, land-use/land-cover change, supervised and unsupervised imagery classification, principle component analysis, machine learning models, segmentation, object detection, change detection, mosaicking
Software:	ArcGIS Pro, QGIS, Google Earth Engine, ENVI, Drone Deploy, Pix4D, Adobe Design Suite, R Studio
Languages:	Intermediate conversational French, beginner German
Programming:	R (proficient), Java Script (proficient), GIS-related Python (beginner)
Drone Certifications:	Federal Aviation Administration (FAA) registered drone pilot, certified by the FAA's Unmanned Aircraft Systems Safety Test (TRUST)

TEACHING (at the University of North Carolina, Chapel Hill)

Instructor of Record, Teaching Fellow:

- Spring 2023: Introduction to Geographic Information (GEOG 370)

Teaching Assistant:

- Fall 2022: Introduction to Geographic Information (GEOG 370)
- Spring 2022: Introduction to GIS (GEOG 491)
- Fall 2021: Food, Agriculture, and Society (GEOG 232)
- Spring 2021: Introduction to Weather and Climate (GEOG 111)
- Spring 2020: Blue Planet (GEOG 110)
- Fall 2019, Fall 2020: Introduction to Remote Sensing (GEOG 477)

Guest lecture:

- March 2023: Anthropological Applications of GIS (ANTH 419)
- February 2022: Food, Environment, and Sustainability (ENEC 237)
- October 2021: Food, Agriculture, and Society (GEOG 232)
- May 2020: Introduction to Remote Sensing (GEOG 477)

RESEARCH GRANTS

Research Assistant (2019 – current):

National Science Foundation (NSF) project titled, "Factors Influencing Vegetation Trends in Dryland Zones" (BCS1759064). PI: Dr. Colin T. West

CARTOGRAPHIC CONSULTING

- Map making for the chapter "Postcolonial Conflict in Southeast Asia: Rethinking the Shatterbelt with Colonial Rupture in Asia's Cold War" by Drs. Christian Lentz and Scott Kirsch in the forthcoming 2023 book *Making Geographies of Peace and Conflict* (ed. Colin Flint and Kara Dempsey)
- Map making for the forthcoming 2023 book *Comrades and Competitors: State-Building at the Sino-Vietnamese Border during the Cold War* by Dr. Qingfei Yin

PRESENTATIONS & POSTERS

- April 2022: African Studies Graduate Symposium, University of North Carolina at Chapel Hill. "Assessing Patterns and Drivers of Land Degradation in West Africa with Drone Remote Sensing" (presentation)
- March 2023: Association of American Geographers Conference 2023, Denver, CO. "Cultivated Borders: Patterns and Drivers of Strategic Borderland Agricultural Development" (presentation)
- May 2023: African Studies Graduate Symposium 2023, University of North Carolina at Chapel Hill. "Imaging degradation: understanding fine-scale signals of land degradation and rehabilitation in West African drylands" (presentation)
- May 2023: GEOINT 2023, St. Louis, MO. "Cultivated Borders: Patterns and Drivers of Strategic Borderland Agricultural Development" (poster, first place winner)

Future:

- May 2024: GEOINT 2024, Orlando, FL. "Recognizing the patterns and drivers of strategic land-use changes in imagery"

SCHOLARSHIPS & AWARDS

- 2023: US Geospatial Intelligence Foundation Research Poster Winner
- 2023: Melinda Meade Summer Research Fellowship, UNC Dept. of Geography (\$2,750)
- 2023: UNC Graduate School Travel Award (\$400)
- 2023: UNC Graduate and Professional Student Government Travel Award (\$600)
- 2022 – 2023: US Geospatial Intelligence Foundation Doctoral Scholarship (\$3,000)
- 2021 Birdsall Research Summer Fellowship, UNC Dept. of Geography (\$1,000)
- 2021 Eyre Travel Award, UNC Dept. of Geography (\$1,000)

SERVICE & AFFILIATIONS

- 2023 – 2024: Co-President of UNC Graduate Association of Geography Students
- 2022 – 2023: Member of UNC Department of Geography's Graduate Advisory Committee
- 2022 – current: Member of United States Geospatial Intelligence Foundation
- 2020 – 2022: Chair of the Oversight and Accountability Committee for the Graduate and Professional Student Government (GPSG)
- 2019 – 2022: GPSG Senator for the Department of Geography
- 2019 – current: Member of UNC Graduate Association of Geography Students
- 2019 – current: Member of Association of American Geographers