

Derek Van Berkel

Associate Professor, PhD

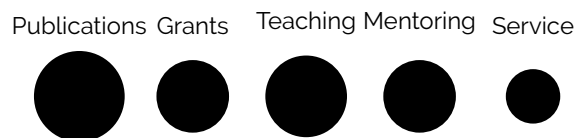
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RESEARCH PROFILE

I am a geospatial data scientist studying how geospatial data, artificial intelligence, and participatory mapping can support communities in understanding and responding to climate change, environmental risk, and land-use change. My research focuses on climate adaptation and migration, flood resilience, urban and landscape change, conservation, and environmental decision-making, with substantial work in the Great Lakes region and East Africa. I combine GIS, remote sensing, machine learning, spatial and land-change modeling, street-level and social-media data, and participatory GIS to develop accessible decision-support tools that integrate environmental models with diverse forms of knowledge and community priorities.

TECHNICAL SKILLS



PROFESSIONAL APPOINTMENTS

2025 - Present	Associate Professor Research focus: climate adaptation, land use modeling, geovisualization.	University of Michigan, SEAS
2026	North America Visiting Fellow Hosted by Prof. Enrico Di Minin; research collaboration in geospatial data science, artificial intelligence, and conservation.	University of Helsinki, Finland
2019 - 2025	Assistant Professor Research focus: climate adaptation, land use modeling, geovisualization.	University of Michigan, SEAS
2017 - 2019	Postdoctoral Researcher Research focus: ecosystem services, geospatial analysis.	US Environmental Protection Agency
2014 - 2017	Postdoctoral Researcher Research focus: geospatial analytics and landscape modeling.	North Carolina State University
2012 - 2014	Postdoctoral Researcher Research focus: landscape modeling.	Ohio State University

LEADERSHIP, FELLOWSHIPS & HONORS

2026	Principal Investigator	Great Lakes Integrated Sciences and Assessments (GLISA)
Present	Leads Great Lakes climate adaptation research and engagement connecting climate science with communities and decision-makers.	
2024	Principal Investigator	Climate Adaptation and Resilience Strategies (CLARS)
Present	Leads U-M research on climate migration, urban change, and climate knowledge exchange across the Great Lakes region and Lake Victoria Basin.	

2025 Present	–Principal Investigator Leads participatory urban modeling and climate-projection research for community-driven flood resilience.	CHIRRP / PUMP-COR
2026	North America Visiting Fellowship Visiting fellowship hosted by Prof. Enrico Di Minin.	University of Helsinki
2024 – 2025	Impact Accelerator Grant Co-PI on integrating climate change and geospatial analytics into next-generation surveillance of epidemic-prone diseases in Ghana.	University of Michigan Center for Global Health Equity

EDUCATION

2009 – 2012	Ph.D. in Spatial Analysis and Decision Support <i>Dissertation:</i> "Mapping, Modeling, and Discussing Rural Development Options"	Vrije Universiteit Amsterdam
2005 – 2007	M.S. in Human Geography and Urban Planning <i>Thesis:</i> "Cambodian Youth, Changing Lives and Perspectives"	Utrecht University
1999 – 2004	B.A. in Human Geography	University of Calgary

PUBLICATIONS

Peer-Reviewed Journal Articles (Total: 51)

§ indicates Advisees

Journal metrics are shown in brackets: Impact Factor (IF) and CiteScore (CS).

2026

49. **Van Berkel, Derek**, Gautam, N., Carter, N., Di Minin, E., Zhang, Y., Mei, H., Yin, S., and Tomkins, S. (2026). Youtube content on wildlife engages audiences but rarely drives meaningful conservation action. *Communications Sustainability*. Accepted for publication
48. Estabrook, T., Van Berkel, D., Jorns, J., and Lemos, M. C. (2026). Exploring climate-induced migration impacts on urban growth. *Computers, Environment and Urban Systems*, 123:102368
47. Song, Y., Millard-Ball, A., Fox, N., **Van Berkel, Derek**, Agrawal, A., and Zhu, K. (2026). Political ideology and scientific communication shape human perceptions of pollen seasons. *PNAS nexus*, 5(1):pgaf386

2025

46. Lemos, M. C., Maillard, L., Herbert, N., Domingue, S. J., Jagannathan, K., Wong-Parodi, G., Goto, E. A., Gill, D., Van Berkel, D., Kalafatis, S., et al. (2025). Scaling up actionable climate knowledge. *Proceedings of the National Academy of Sciences*, 122(50):e2515771122 IF 9.1
45. Fox, N., Di Minin, E., Carter, N., Tomkins, S., and Van Berkel, D. (2025). Balancing accessibility and security: Safeguarding citizen-sourced biodiversity data in the age of ai and open-sourced software. *Ecological Informatics*, page 103443 IF 11.4
44. Yang, X., Grace, D., Chen, C., Van Berkel, D., Fox, N., and Lindquist, M. (2025a). Cross-national comparison of the restorative potential of urban forests in different seasons. *Landscape and Urban Planning*, 264:105491 IF 9.2
43. Yang, X., Lindquist, M., and Van Berkel, D. (2025b). "streetscape" package in r: A reproducible method for analyzing open-source street view datasets and facilitating research for urban analytics. *SoftwareX*, 29:101981 IF 3.4 · CS 5.1

2024

42. Maguire-Jack, K., VanBerkel, D., Chang, O. D., Spilsbury, J. C., and Chang, Y. (2024). Testing the appropriateness of social disorganization theory in the study of neighborhood factors and rural child maltreatment. *Child Maltreatment*, page 10775595241305606 IF 4.5
41. Campbell-Arvai, V., Vergel, R. S., Lindquist, M., Fox, N., and Van Berkel, D. (2024). Tree selection for a virtual urban park: Comparing aided and unaided decision-making to support public engagement in greenspace design. *Urban Forestry & Urban Greening*, page 128447 IF 6.0 · CS 11.7
40. Yang, X., Lindquist, M., Van Berkel, D., and Grace, D. (2024b). A viewscape-based approach for assessing perceived walkability in cities. *Journal of Digital Landscape Architecture*, pages 735–746 IF 0.7
39. Yang, X., Fox, N., **Van Berkel, Derek**, and Lindquist, M. (2024a). Viewscape: An r package for the spatial analysis of landscape perception and configurations in viewsheds of landscapes. *SoftwareX*, 26:101662 IF 3.4 · CS 5.1

2023

38. Guan, J., Wang, R., **Van Berkel, Derek**, and Liang, Z. (2023). How spatial patterns affect urban green space equity at different equity levels: A bayesian quantile regression approach. *Landscape and Urban Planning*, 233:104709
IF 9.2
37. Fox, N., **Van Berkel, Derek**, Vergel, R. S., and Lindquist, M. (2023b). vgamereviews: An r package for harnessing video game reviews for scientific research. *SoftwareX*, 23:101423 IF 3.4 · CS 5.1
36. Smart, L. S., Seekamp, E., **Van Berkel, Derek**, Vukomanovic, J., and Smith, J. W. (2023). Socio-spatial factors influence climate change adaptation decisions of rural coastal landowners. *Landscape Ecology*, pages 1–19 IF 5.2
35. Schirpke, U., Ghermandi, A., Sinclair, M., **Van Berkel, Derek**, Fox, N., Vargas, L., and Willemen, L. (2023). Emerging technologies for assessing ecosystem services: A synthesis of opportunities and challenges. *Ecosystem Services*, 63:101558 IF 7.6 · CS 12.4
34. Fox, N., Lidquist, M., **Van Berkel, Derek**, and Vergel, R. S. (2023a). A collaborative augmented reality decision support system for crowdsourcing urban designs. *Journal of Digital Landscape Architecture*, 8:195–202 IF 0.7
33. **Van Berkel, Derek**, Estabrook, T., Fox, N., Bejarano, R. A., Maillard, L., Gill, D., Goto, E. A., and Lemos, M. C. (2023a). Ppgisr: An r package for public participatory gis. *SoftwareX*, page 101389 IF 3.4 · CS 5.1
32. Langemeyer, J., Ghermandi, A., Keeler, B., and **Van Berkel, Derek** (2023). The future of crowd-sourced cultural ecosystem services assessments. *Ecosystem Services*, 60:101518 IF 7.6 · CS 12.4
31. Ghermandi, A., Langemeyer, J., **Van Berkel, Derek**, Calcagni, F., Depietri, Y., Vigl, L. E., Fox, N., Havinga, I., Jäger, H., Kaiser, N., et al. (2023). Social media data for environmental sustainability: A critical review of opportunities, threats, and ethical use. *One Earth*, 6(3):236–250 IF 16.2

2022

30. Liu, Y., Rao, P., Zhou, W., Singh, B., Srivastava, A. K., Poonia, S. P., **Van Berkel, Derek**, and Jain, M. (2022). Using sentinel-1, sentinel-2, and planet satellite data to map field-level tillage practices in smallholder systems. *Plos one*, 17(11):e0277425 IF 3.7
29. **Van Berkel, Derek**, Kalafatis, S., Gibbons, B., Naud, M., and Lemos, M. C. (2022). Planning for climate migration in great lake legacy cities. *Earth's Future*, 10(10) IF 8.2
28. Morrison, T. H., Adger, W. N., Agrawal, A., Brown, K., Hornsey, M. J., Hughes, T. P., Jain, M., Lemos, M. C., McHugh, L. H., O'Neill, S., et al. (2022). Radical interventions for climate-impacted systems. *Nature Climate Change*, pages 1–7 IF 16.2
27. Fox, N., Serrano-Vergel, R., **Van Berkel, Derek**, and Lindquist, M. (2022c). Towards gamified decision support systems: In-game 3d representation of real-word landscapes from gis datasets. *Journal of Digital Landscape Architecture*, pages 356–364 IF 0.7
26. Fox, N., Campbell-Arvai, V., Lindquist, M., **Van Berkel, Derek**, and Serrano-Vergel, R. (2022a). Gamifying decision support systems to promote inclusive and engaged urban resilience planning. *Urban Planning*, 7(2) IF 1.8
25. Mei, W., Wang, H., Fouhey, D., Zhou, W., Hinks, I., Gray, J. M., **Van Berkel, Derek**, and Jain, M. (2022). Using deep learning and very-high-resolution imagery to map smallholder field boundaries. *Remote Sensing*, 14(13):3046 IF 5.0 · CS 7.9
24. Fox, N., Chamberlain, B., Lindquist, M., and **Van Berkel, Derek** (2022b). Understanding landscape aesthetics using a novel viewshed assessment of social media locations within the troodos unesco global geopark, cyprus. *Frontiers in Environmental Science*, page 1111 IF 4.6 · CS 3.1
23. Maguire-Jack, K., Jespersen, B., Korbin, J. E., **Van Berkel, Derek**, and Spilsbury, J. C. (2022). Neighborhood effects on child maltreatment in rural areas. In *Neighborhoods, Communities and Child Maltreatment*, pages 117–129. Springer
22. Wilkins, E. J., **Van Berkel, Derek**, Zhang, H., Dorning, M. A., Beck, S. M., and Smith, J. W. (2022). Promises and pitfalls of using computer vision to make inferences about landscape preferences: Evidence from an urban-proximate park system. *Landscape and Urban Planning*, 219:104315 IF 9.2

2021

21. Zhang, H., **Van Berkel, Derek**, Howe, P. D., Miller, Z. D., and Smith, J. W. (2021). Using social media to measure and map visitation to public lands in utah. *Applied Geography*, 128:102389 IF 4.9 · CS 8.1

2019

20. **Van Berkel, Derek**, Shashidharan, A., Mordecai, R. S., Vatsavai, R., Petrasova, A., Petras, V., Mitsova, H., Vogler, J. B., and Meentemeyer, R. K. (2019). Projecting urbanization and landscape change at large scale using the futures model. *Land*, 8(10):144 IF 3.9 · CS 3.7
19. Tabrizian, P., Baran, P. K., **Van Berkel, Derek**, Mitsova, H., and Meentemeyer, R. (2020). Modeling restorative potential of urban environments by coupling viewscape analysis of lidar data with experiments in immersive virtual environments. *Landscape and Urban Planning*, 195:103704 IF 9.2
18. Koch, J., Dorning, M. A., **Van Berkel, Derek**, Beck, S. M., Sanchez, G. M., Shashidharan, A., Smart, L. S., Zhang, Q., Smith, J. W., and Meentemeyer, R. K. (2019). Modeling landowner interactions and development patterns at the urban fringe. *Landscape and Urban Planning*, 182:101–113 IF 9.2

2018

17. Gallemore, C., Munroe, D., and **Van Berkel, Derek** (2018). Rural-to-urban migration and the geography of absentee non-industrial private forest ownership: A case from southeast ohio. *Applied Geography*, 96:141–152 IF 4.9 · CS 8.1
16. Hermes, J., **Van Berkel, Derek**, Burkhard, B., Plieninger, T., Fagerholm, N., von Haaren, C., and Albert, C. (2018). Assessment and valuation of recreational ecosystem services of landscapes IF 7.6 · CS 12.4
15. **Van Berkel, Derek**, Tabrizian, P., Dorning, M. A., Smart, L., Newcomb, D., Mehaffey, M., Neale, A., and Meentemeyer, R. K. (2018b). Quantifying the visual-sensory landscape qualities that contribute to cultural ecosystem services using social media and lidar. *Ecosystem Services* IF 7.6 · CS 12.4
14. **Van Berkel, Derek**, Rayfield, B., Martinuzzi, S., Lechowicz, M. J., White, E., Bell, K. P., Colocousis, C. R., Kovacs, K. F., Morzillo, A. T., Munroe, D. K., et al. (2018a). Recognizing the "sparsely settled forest": Multi-decade socioecological change dynamics and community exemplars. *Landscape and Urban Planning*, 170:177–186 IF 9.2

2017

13. Dorning, M. A., **Van Berkel, Derek**, and Semmens, D. J. (2017). Integrating spatially explicit representations of landscape perceptions into land change research. *Current Landscape Ecology Reports*, pages 1–16 IF 1.6
12. Munroe, D. K., Gallemore, C., and **Van Berkel, Derek** (2017). Hot tub cabin rentals and forest tourism in hocking county, ohio. *Revue économique*, 68(3):491–510 IF 0.4
11. Pickard, B. R., **Van Berkel, Derek**, Petrasova, A., and Meentemeyer, R. K. (2017). Forecasts of urbanization scenarios reveal trade-offs between landscape change and ecosystem services. *Landscape Ecology*, 32(3):617–634 IF 5.2

2016

10. van Zanten, B. T., **Van Berkel, Derek**, Meentemeyer, R. K., Smith, J. W., Tieskens, K. F., and Verburg, P. H. (2016). Continental-scale quantification of landscape values using social media data. *Proceedings of the National Academy of Sciences*, page 201614158 IF 9.1

2014 and older

9. Morzillo, A. T., Colocousis, C. R., Munroe, D. K., Bell, K. P., Martinuzzi, S., **Van Berkel, Derek**, Lechowicz, M. J., Rayfield, B., and McGill, B. (2015). "communities in the middle": Interactions between drivers of change and place-based characteristics in rural forest-based communities. *Journal of Rural Studies*, 42:79–90 IF 5.1 · CS 8.1
8. **Van Berkel, Derek** and Verburg, P. H. (2014). Spatial quantification and valuation of cultural ecosystem services in an agricultural landscape. *Ecological indicators*, 37:163–174 IF 6.9 · CS 10.3
7. **Van Berkel, Derek**, Munroe, D. K., and Gallemore, C. (2014). Spatial analysis of land suitability, hot-tub cabins and forest tourism in appalachian ohio. *Applied Geography*, 54:139–148 IF 4.9 · CS 8.1
6. Munroe, D. K., **Van Berkel, Derek**, Verburg, P. H., and Olson, J. L. (2013). Alternative trajectories of land abandonment: causes, consequences and research challenges. *Current Opinion in Environmental Sustainability*, 5(5):471–476 IF 7.2 · CS 14.1
5. **Van Berkel, Derek** and Verburg, P. H. (2012). Combining exploratory scenarios and participatory backcasting: using an agent-based model in participatory policy design for a multi-functional landscape. *Landscape ecology*, 27(5):641–658 IF 5.2

4. **Van Berkel, Derek**, Carvalho-Ribeiro, S., Verburg, P. H., and Lovett, A. (2011). Identifying assets and constraints for rural development with qualitative scenarios: a case study of castro laboreiro, portugal. *Landscape and Urban Planning*, 102(2):127–141 IF 9.2
3. **Van Berkel, Derek** and Verburg, P. H. (2011). Sensitising rural policy: Assessing spatial variation in rural development options for europe. *Land Use Policy*, 28(3):447–459 IF 7.1 · CS 11.8
2. Lovett, A., Ribeiro, S. C., **Van Berkel, Derek**, Verburg, P., and Firmino, A. (2010). Representing and communicating rural futures through 3d landscape visualizations—experiences from the rufus project. *Peer reviewed proceedings of digital landscape architecture*, pages 261–268 IF 0.7
1. Verburg, P. H., **Van Berkel, Derek**, van Doorn, A. M., van Eupen, M., and van den Heiligenberg, H. (2010). Trajectories of land use change in europe: a model-based exploration of rural futures. *Landscape ecology*, 25(2):217–232 IF 5.2

Preprints

3. Yang, X., Tian, A., **Van Berkel, Derek**, Qiang, X., and Lindquist, M. (2026). Can urban blight be accessed with vision-language models: A case study in detroit. arXiv preprint arXiv:2608.01753
2. Li, Z., **Van Berkel, Derek**, Hasell, A., Schoenebeck, G., Ryan, J. B., and Tomkins, S. (2026). Annotatethis: Analyzing a human-llm system for annotating social media data with the concept of climate change mitigation pessimism. arXiv preprint arXiv:2606.10210
1. Zou, H.-X., Yang, X., Hajamaideen, T. H., Stein, O. J., Beltran, R. S., Freeman, B. G., Lindquist, M., Miller, E. T., Mengarelli, S., Probst, C. M., Valdovinos, F. S., **Van Berkel, Derek B.**, Zarnetske, P. L., Weeks, B. C., and Zhu, K. (2026). Large language models unlock the ecology of species interactions. bioRxiv preprint 2026.02.06.704115. doi:10.64898/2026.02.0

Conference Papers and Book Chapters (Total: 7)

7. **Van Berkel, Derek**, Fox, N., Cousins, S., and Zhu, K. (2023b). Can social media help us understand the impact of climate change on forests in the us? *Forum 2023 - Harnessing the Geospatial Data Revolution for Sustainability Solutions*
6. Depietri, Y., Langemeyer, J., **Van Berkel, Derek**, and Ghermandi, A. (2023). Advancing sustainability research through geospatial technology and social media. In *The Routledge Handbook of Geospatial Technologies and Society*, pages 494–504. Taylor and Francis AS
5. Shashidharan, A., **Van Berkel, Derek**, Vatsavai, R. R., and Meentemeyer, R. K. (2018). Futures-amr: Towards an adaptive mesh refinement framework for geosimulations. In *GIScience 2018 International Conference on Geographic Information Science*, pages –. Springer
4. Supak, S., Brothers, G., Ghahramani, L., and **Van Berkel, Derek** (2017). Geospatial analytics for park & protected land visitor reservation data. In *Analytics in Smart Tourism Design*, pages 81–109. Springer
3. Zhang, Q., Vatsavai, R. R., Shashidharan, A., and **Van Berkel, Derek** (2016). Agent based urban growth modeling framework on apache spark. In *Proceedings of the 5th ACM SIGSPATIAL International Workshop on Analytics for Big Geospatial Data*, pages 50–59. ACM
2. Shashidharan, A., **Van Berkel, Derek**, Vatsavai, R. R., and Meentemeyer, R. K. (2016). pfutures: A parallel framework for cellular automaton based urban growth models. In *International Conference on Geographic Information Science*, pages 163–177. Springer
1. Petrasova, A., Petras, V., **Van Berkel, Derek**, Harmon, B., Mitasova, H., and Meentemeyer, R. (2016). Open source approach to urban growth simulation. *Int Arch Photogramm Remote Sens Spat Inf Sci*, 41:B7

Papers Under Review or Revision

- Maillard, L., Akemi Goto, E., Yin, S., Gill, D., Blevins, Z., Holmes McHugh, L., **Van Berkel, D.**, & Lemos, M.C. Sustainability Knowledge Transitions: evidence of change and impact. *Global Environmental Change*.
- Campbell-Arvai, V., Serrano Vergel, R., Lindquist, M., Fox, N., & **Van Berkel, D.** Plant your park!: Intuitive and aided decision-making in a virtual tree-planting exercise. *Environmental Psychology*.

Work in Progress

- Dorning, M. **Van Berkel, Derek**, Smith, J., Wilkins, E., Zhang, H., & Beck, S. Social Landscape Values and Iconic Views in Boulder Open Space and Mountain Parks Lands. Target *Ecosystem Services*
- **Van Berkel, Derek**, Koen Tieskens, Boris van Zanten, Jordan Smith, Megan Mehaffey, Anne Neale, & Peter Verburg. Social Media: A "Big Data" Lens for Mapping and Quantifying Human-Nature Interactions. Target *Nature Sustainability*

- Yang, X., Lindquist, M., **Van Berkel, Derek**, Grace, D., & Fox, N. Cross-national comparison of the emotional responses and restorative potential of audio-visual landscape in different seasons. Target: *Landscape and Urban Planning*
- Yang, X., Lindquist, M., **Van Berkel, Derek**, Grace, D., & Fox, N. the relationship between auditory perception and spatial green space in urban scale based on predicted soundscape emotion using machine learning. Target: *Landscape Ecology*
- **Van Berkel, Derek**, Amy Lesen, Brian Stone, & Angela Chalk. Improving community science through photovisualization surveys.
- **Van Berkel, Derek**, Jeremy Baynes, Sean Woznicki, Megan Mehaffey, & Anne Neale. What is the value of America's Nature: a travel cost social media method.
- Darla Munroe, Jeff Olson, **Van Berkel, Derek** Yuxi Zhao & Calleb Gallemore. Multifunctional forest transitions in exurban landscapes reflect heterogeneous land-use and ownership motivations of new arrivals and long-term residents. Major Revisions: *Land Use Policy*.

Other Publications

- Ghermandi, A., **Van Berkel, Derek**, and Langemeyer, J. (2022). Twitter's totter must prompt research rethink. *Nature*, 612(7939):211–211 IF 64.8
- **Derek Van Berkel**, & Peter Verburg. (2011). De toekomst van het landschap in de Achterhoek: Sturende factoren en wensen voor de toekomst. *Institute for Environmental Studies, VU University*.
- Lael Gilbert, L., Jordan Smith, **Derek Van Berkel**, & Boris van Zanten. (2016). Tapping into social media data to identify the public's most valued landscapes. (IORT-PR-2016-07). *Logan, UT: Institute of Outdoor Recreation and Tourism, Utah State University*.
- Lael Gilbert, Jordan Smith, Brois van Zanten, & **Derek Van Berkel** (2016). Mapping landscape values using social media. (IORT-PR-2016-06). *Logan, UT: Institute of Outdoor Recreation and Tourism, Utah State University*.

GRANT ACTIVITY

Pending & Funded

2025 - 2027	Biorepositories for Adaptive Resilience to Climate Speers, Kelly (PI), Thompson, Cody (Co-PI), Van Berkel, Derek (Co-PI), Roberts, Elizabeth (Co-PI), Cook, Joseph (Co-PI), Becker, Daniel (Co-PI), et al.; <i>Systems Thinking in Climate Resilience: Facilitating Co-production for Equity and Representation</i> ; Funded: \$549,885.	NSF - Belmont Forum
2023 - 2027	Building an Equity-Oriented Engagement Framework for the Flood-Wise Communities Process in the Great Lakes and South-Central Regions Van Berkel, Derek (PI), Lemos, Maria (Co-PI), Jorns, Jenna (Co-PI); Funded: \$410,000.	NOAA
2025 - 2027	Integrating Participatory Urban Modeling and Climate Projections for Community-Driven Flooding Resilience (PUMP-COR) Van Berkel, Derek (PI), Lemos, Maria Carmen (Co-PI), Bricker, Jeremy (Co-PI), & Notaro, Michael (Co-PI); Funded: \$200,000.	NSF - CHIRRP Planning Grant
2024 - 2027	Climate Adaptation and Resilience Strategies (CLARS): Socio-Economic Vulnerabilities among Urban Migrants in the Lake Victoria Basin and Great Lakes Region Van Berkel, Derek (PI), Maria Lemos, Gail Krantzberg, Cedric Nkiko, et al.; Funded: \$614,333.	NSF - NERF
2024 - 2026	Distributing Expert Attention in Complementary Systems Sabina Tomkins (PI), John Ryan, Ariel Hasell, Grant Schoenebeck, Van Berkel, Derek, et al.; Funded: \$70,000.	MIDAS - PODS
2023 - 2027	Integrating Public Health into GLISA's FloodWise Communities Vulnerability Assessment Framework Van Berkel, Derek (PI), Lemos, Maria (Co-PI), Jorns, Jenna (Co-PI); Funded: \$410,000.	Michigan Department of Health & Human Services
2024 - 2025	Enhancing Equitable Outcomes Assessment for the Joe Louis Greenway Development in Detroit: A Community-Centered Digital Monitoring System Van Berkel, Derek (PI); Funded: \$100,000.	SEAS Sustainability Clinic
2024 - 2025	Integrating Climate Change and Geospatial Analytics into Next-Generation Surveillance of Epidemic-Prone Diseases in Ghana Schroeder, Lee (PI), Zelner, Jon (Co-PI), Van Berkel, Derek (Co-PI), et al.; Funded: \$98,560.	Center for Global Health Equity Impact Accelerator Grants
2023	Wow 4D: Working on Workflows for Data-Driven Design and Decision-Making at the University of Michigan DuRussel, Lisa (PI), Lindquist, Mark (Co-PI), Van Berkel, Derek (Co-PI), Gilpin, Dawn (Co-PI), et al.; Funded: \$29,985.	SEAS Theme Funding
2023 - 2025	Artificial Intelligence and Crowd-Sourced Big Data for Biodiversity Monitoring Van Berkel, Derek (PI), Tomkins, Sabina (Co-PI), Carter, Neil (Co-PI); <i>Fellowship for Nathan Fox</i> ; Funded: \$150,000.	Schmidt AI - UMICH
2022 - 2024	Sustainable Innovations XR Collaboratory Lindquist, Mark (PI), Van Berkel, Derek (PI), Fox, Nathan (I), Serrano Vergel, Ramiro (I), Nebeling, Michael (Co-PI), Baker, Wayne (Co-PI), Uribe, Jose (Co-PI); Funded: \$80,000.	SEAS Theme Funding
2021 - 2026	Great Lakes Integrated Sciences and Assessments (GLISA) Lemos, Maria Carmen (PI), Van Berkel, Derek (Co-PI), Rood, Richard (Co-PI), Jorns, Jenna, et al.; Subaward Funded: \$4,333,284.	NOAA - CAP/RISA
2021	A Tourism Decision Support System for Western Gateway and Natural Amenity Region Communities Smith, J (PI), Van Berkel, Derek (Co-PI), Rumore, Danya (Co-PI); Subaward Funded: \$7,800.	NSF: SCC-CIVIC-FA Track B
2020 - 2023	Co-Creating High-Performing Landscapes to Tackle Climate Change with Citizen Science & Crowdsourcing Lindquist, Mark (PI), Van Berkel, Derek (Co-PI), Campbell-Arvai, Victoria (Co-PI); Funded: \$299,944.	NSF2026: EAGER
2020 - 2022	Supporting Flood Planning in the Great Lakes and Intermountain West Regions in the Context of Climate Change, Future Growth, and Migration Lemos, Maria Carmen (PI), Van Berkel, Derek (Co-PI), Hughes, Sara (Co-PI), Kalafatis, Scott (Co-PI), Dilling, Lisa (Co-PI), Payton, Liz (Co-PI), Woelders, Lineke (Co-PI); Funded: \$856,944.	NOAA

2020 - 2023	Co-Producing a Data-Coupled Video Game Decision Support System with Urban Forestry Practitioners Lindquist, Mark (PI), Van Berkel, Derek (Co-PI), Campbell-Arvai, Victoria (Co-PI); Funded: \$366,648.	USDA - McIntire-Stennis
2019 - 2021	Scaling the Perceptual and Physiological Benefits of Urban Greenspace Lindquist, Mark (PI), Van Berkel, Derek (Co-PI), Weber, S. (Co-PI); <i>Translational Research Diamond Program</i> ; Funded: \$15,000.	MICHR
2019	Community Science for Measuring and Monitoring the Effects of Greening on the Urban Heat Island Effect, Water Uptake, and Social Challenges Lesen, A. (PI), Van Berkel, Derek (Co-PI), Chalk, A. (PI), Stone, B.; <i>Community Engaged Research Grant Program</i> ; Funded: \$3,825.	Tulane University
2018 - 2019	Identifying the Benefits of Cultural Resources and Iconic Views Through Social Media Smith, J (PI), Van Berkel, Derek (Co-PI), Dorning, M (Co-PI), Beck, S (Co-PI); <i>Open Space & Mountain Parks Funded Research Program</i> ; Funded: \$14,885.	City of Boulder

TEACHING

Courses taught

2023 Present	-Social Media for Sustainability (EAS 677) This graduate seminar delves into the strategic use of social media for sustainability, exploring its role in research, conservation, and climate action. Through interactive sessions, group discussions, live experiments, and case studies, students critically analyze social media's impact on real-world sustainability challenges. The course seeks to enhance comprehension of social media's role in sustainability research, covering effective messaging, platform biases, and ethical/legal considerations in sustainability communication through social media.	University of Michigan - SEAS
2023 Present	-Communicating Sustainability in the Digital Age (ENVIRON 427) This undergraduate course in the Program for the Environment(PITE) explores sustainable communication through visuals and community-engaged methods. Students discover innovative ways to engage the public in environmental discussions using social media and decision support tools. The class enhances comprehension of how people interpret visual representations, teaches impactful data visualization in the digital era, and introduces methods for developing and applying decision-support tools. Lectures, discussions, and hands-on assignments with free and open-source software packages and decision support tools equip students with practical communication skills.	University of Michigan - PITE
2020 Present	-Introductory (EAS 548) & Advanced Geovisualization (EAS 648) Students gain competency in cartographic principles, data visualization theory, and learn techniques for collecting, analyzing, and presenting geospatial data using open source software. Key to this instruction is learning advanced data science technique for cleaning and quickly mapping and visualizing data. It also provides instruction on how to obtain data from both traditional public repositories and new sources (e.g., social media), and strengthen students' competencies in making their findings open to the public, by developing HTML web-publishable and mobile phone applications.	University of Michigan - SEAS
2021 -	Sustainable Development MOOC (coursera): Geovisualization The course is an introduction to using GIS to create effective geovisualization in the context of the Sustainable Development Goals (SDGs). It provides students with the history of GIS, orients them on its value for understanding the SDGs, and instructs them on cartographic theory (e.g. legends, using color), and GIS fundamentals (e.g. projection, raster and vector datatypes). Students apply these theories by developing their own maps in GoogleSheets and R studio.	University of Michigan - SEAS

2021 – 2022	Modeling for Landscape Planning (EAS 687) The course provides students with a foundational understanding of the theories, methods, and applications in stakeholder engaged landscape planning. The entire semester consists of student-led group projects. Each group is required to develop a 1) a community, and 2) stakeholder profile for their region of study, and tools and strategies to tackle a regional issue using 3) landscape models, and 4) a decision support tool. This is scaffolded by lab instruction in GIS, landscape modelling (e.g. The Invest model, spatial suitability analysis) and stakeholder engagement (e.g. scenario development, PGIS). Project deliverables have been rich, covering diverse regions from Cambodia to Detroit to New Orleans using traditional landscape architecture (e.g design visuals, scenarios) and novel digital techniques (e.g. 3D visualizations, webapplications).	University of Michigan - SEAS
2020	Frontiers in Land change modeling and landscape planning Seminar on the theories, methods, and applications in modeling. This included instruction in land use/cover change detection, model calibration, backcasting, hindcasting, model validation, cellular automata, and agent based models.	University of Michigan - SEAS
2014-2017	GIS 610 – Landscape Dynamics Seminar Theories, methods, and applications in land change modelling including model calibration, backcasting, hindcasting, model validation, cellular automata, and agent based models.	North Carolina State University
2013-2014	Geography 3751 – The Socioecological Geography of Appalachian Ohio (Undergraduate Field Course) Thematic focus on land use change, political ecology, conservation and restoration ecology, historical geography, and regional development of Appalachian Ohio	The Ohio State University

Supervision

- Duong, Huong Giang (MSc Student). Title: Integrating Decision Support Systems for Sustainable Planning in the Lake Victoria Basin, Africa.
- Hu, Yixin (MSc Student). Title: Developing a Typology of U.S. Urban Morphology for Understanding Potential Densification: Designing Inclusive PPGIS Tools for Urban Adaptation.
- Li, Muqianqian (MSc Student). Title: Designing Inclusive PPGIS Tools for Urban Flood Resilience.
- Ning, Zhongrui (MSc Student). Title: Analyzing Behavioral Responses to Climate Anomalies Through Social Media.
- He, Yuxin (MSc Student). Title: Impact of Social Media on Public Behavior and Response Strategies during Wildfire and Land Change Events.
- Fang, Xiaoqian (Visiting PhD Candidate - Department of Land Management, School of Public Affairs, Zhejiang University). Title: The function conflicts over agricultural land use in China: identification, driving mechanism, and management. Expected graduation 2025
- Grace, David (PhD, 2026). Title: Modelling Spiritual Values of the Environment
- Gill, Devin (PhD, 2026). Title: Scaling up the production of actionable climate knowledge in Great Lakes cities through participatory GIS. Co-advisor with Maria Carmen Lemos.
- Hu, Wei (MSc degree 2021). Title: Validating computer vision technologies for social media interpretation of outdoor aesthetics.
- Yang, Xiaohao (MSc degree 2021). Title: Relationship between Perceived Emotional Response to Soundscape and Urban Green Space Based on A Deep Learning Approach. Co-advisor with Mark Lindquist
- Agrawal Bejarano, Rahul (MSc degree 2021). Title: Exploring how extreme weather events, natural disasters and climate change are reported in online news articles for countries with differing climate baselines. Co-advisor with Shelie Miller
- Yifan Luo (MSc degree 2021). Title: Gelman Site 1,4-Dioxane Groundwater Contamination Plume Modeling and Forecasting. Co-advisor with Drew Gronewold
- Mosiniak, Hannah (MSc degree 2020). Title: Redlining and Urban Heat Islands: An analysis of historic housing discrimination and heat exposure.
- Li, Zijun (MSc degree 2020). Title: Assessing heat vulnerability of New Orleans using multitemporal remote sensing and demographic data.

- Sun, Chi; Lyons, Gail; Yan, Jing; McBurrows, Saj; Xu, Shiru; Chang, Yidan (Masters Project, 2023). Title: Enhancing Equitable Outcomes Assessment for the Joe Louis Greenway Development in Detroit: A Community-Centered Digital Monitoring System. Client: The City of Detroit & Detroit Sustainability Clinic SEAS.
- Koth, Savannah, Power, Jordan, Zhang, Sipeng (MSc degree 2023) & (Masters Project). Title: Detroit's Joe Louis Greenway: Community-Based Methods for Mapping Equity, Connectivity, and Access to Green Public Space Improvements. Client: The City of Detroit & Detroit Sustainability Clinic SEAS.
- Li, Yan; Xing, Chuhan; Jia, Meng; & Mo, Yanling (Masters Project, 2021). Title: Infrastructure as public space: Meditations on equitable access (Joe Louis Greenway). Client: The City of Detroit & SmithGroup.

PhD Committee

- Alexander Killion (PhD 2021). Title: Coexisting with wildlife in shared landscapes: an interdisciplinary assessment to inform conservation
- Jiayang Li (PhD 2022). Title: Integrating landscape perception into cultural ecosystem services: immediate response to human-dominated landscape and implication for design
- Calli Vander Wilde (PhD 2023). Title: Embeddedness and environmental governance of palm oil supply chains
- Tara Easter (PhD 2023). Title: Situating turtle harvest sustainability within the broader social-ecological system of the Lower Mississippi River Basin
- Jake Hawes (PhD 2024). Title: Metabolism of urban agriculture
- Iris Saraeny Rivera Salinas (PhD Student). Title: The role of trait-mediated indirect interactions in the biological control of coffee pests. Expected graduation 2024
- Lisa Maillard (PhD Student). Title: Deconstructing 'Actionable Knowledge': An evaluation of climate knowledge-to-action processes and their scaling-up potential. Expected graduation 2025
- Xiaohao Yang (PhD Student). Title: Mapping Perceived Soundscape Perceptions in Audio-visual Social Media Data. Expected graduation 2027
- Chai Allah Abdesslam (PhD Student - Université Clermont Auvergne, Santé, Agronomie, Environnement). Title: Experiencing nature: A data science approach to quantify cultural ecosystem services using crowdsourced spatial data. Expected graduation 2025.

INVITED PRESENTATIONS AND COLLOQUIA

05/2024	2024 World Environmental & Water Resources Congress Guest speakers: <i>Planning for Climate Migration in Great Lake Legacy Cities</i> ; Milwaukee, WI	American Society of Civil Engineers
03/2024	GRoW Home at University at Buffalo	University at Buffalo
11/2023	Panel Discussant: <i>Buffalo: A Climate Haven?</i> ; Virtual Honors Colloquium on Climate Change & Migration Invited presentation: <i>Planning for Climate Migration in Great Lake Legacy Cities</i> ; Detroit, MI	Henry Ford College
06/2023	MEDA Annual Meeting - Session: Creating a Welcoming Climate Migration Haven Invited presentation: <i>Planning for Climate Migration in Great Lake Legacy Cities</i> ; Marquette, MI	Northern Michigan University
04/2023	Climate Migration Webinar – Is the Great Lakes Region a Climate Haven? Invited presentation: <i>Planning for Climate Migration in Great Lake Legacy Cities</i> ; LINK	CGLR-MLive Webinar
11/2022	Fall Joint Environmental Conference, Environmental Law Section Invited presentation: <i>Planning for Climate Migration in Great Lake Legacy Cities</i> ; Lansing, MI	State Bar of Michigan
8/2022	Twin Ports Climate Conversation (TPCC) Invited presentation: <i>Considering climate migration in a Great Lakes city: Perceptions and Scenarios</i> ; Virtual	Minnesota DNR
4/2022	Sustainable Food Systems Initiative Invited presentation, Food for Thought: "Why Trees are so Important for Urban Agriculture in Frontline Communities"; Virtual - LINK TO TALK	University of Michigan
12/2021	Fall Meeting Invited panelist: <i>The Anthropocene Comes Home: Innovation and Adaptation in Louisiana</i> ; New Orleans, LA	American Geophysical Union

7/2021	Urban Big Data Centre Invited presentation, Mobile phone and social media data for human-nature research: <i>"Scalable methods for mapping cultural ecosystem services and community engagement: Social Media, mobile phone data and online applications"</i> ; Virtual	University of Glasgow
4/2017	Ecology, Evolution, and Behavior departmental seminar Invited presentation: <i>"Leveraging Social media for understanding interactions with the environment"</i> ; Winston-Salem, NC	Wake Forest University
10/2016	Academy of Disaster Reduction and Emergency Management Invited presentation: <i>"Leveraging social media for disaster monitoring and ecosystem services assessment"</i> ; Beijing, China	Beijing Normal University
9/2016	Workshop on Assessment and Economic Valuation of recreational Ecosystem Services of Landscapes in EU Member States Invited presentation: <i>"Leveraging Social Media for Mapping Ecosystem Services"</i> ; Hanover, Germany	Leibniz Universität
6/2016	Webinar series Invited presentation: <i>"The FUTURES model: An open-source tool for understanding where cities will grow in the future and how this will impact conservation efforts"</i> ; Virtual	South Atlantic Landscape Conservation Cooperative
4/2016	Department of Geography and Environmental Sustainability Invited lecture: <i>"Leveraging Agent Based Models for environmental and resource management"</i> ; Virtual	Oklahoma University
3/2016	Nicholas Institute for Environmental Policy Solutions Invited lecture: <i>"Understanding Urbanization Threats to Conservation using the FUTURES model"</i> ; Durham, NC	Duke University
3/2014	Center for Geospatial Analytics Invited Presentation: <i>"Methods for integrating people in Maps: Web scraping, Agent-based models and social-spatial collaborative decision making"</i> ; Raleigh, NC	North Carolina State University
10/2013	Department of Geography Invited Presentation: <i>"Assessing the spatial variation in the use, management and plans for the forests in Appalachian Ohio"</i> ; Columbus, OH	The Ohio State University

CONFERENCE PRESENTATIONS

- 81st Annual AAPOR Conference, 2026: *"Surfacing Climate Pessimism on TikTok with a Human-LLM Annotation System."*
- IALE-North America 2025 | Raleigh, North Carolina. April 13-17: *"Exploring Climate-Induced Migration Impacts on Urban Growth."*
- AAG 2025 | Detroit, Michigan. March 24-28: *"Exploring Climate-Induced Migration Impacts on Urban Growth in Potential Receiving Communities."*
- CHI 2024 | Honolulu, Hawaii. May 11-16: *"Mobilizing online for wildlife conservation – Surfacing appreciation, concern and calls to action on social media."*
- IALE-North America 2024 Annual Meeting | Oklahoma City. April 1-5: *"Exploring Human-Wildlife Interactions on YouTube: Analysis of Global Wildlife Content Using AI and Social Media Data."*
- IALE-North America 2023 Annual Meeting | Riverside, California. March 19-23: *"PPGISr: An R package for Public Participatory GIS."*
- IALE-North America 2022 Annual Meeting | Riverside, California. May 27-31: *"Crowdsourcing social media data can boost understanding of landscape benefits."*
- 2021 IASNR Conference - Virtual Conference | Remote Virtual Conference. June 20-24: *"A Method for Mapping Cultural Ecosystem services for the continental US using Social Media."*
- EDRA52 DETROIT: JUST ENVIRONMENTS 2021 Annual Meeting | Remote Virtual Conference. May 19-22: *"Detroit's Joe Louis Greenway."*
- IALE-North America 2020 Annual Meeting | Remote Virtual Conference. May 11-14: *"Estimating the value of urban cultural ecosystem services for the United States."*
- Ecosystem Services Partnership. 10 years advancing ecosystem services science, policy and practice for a sustainable future. Hannover, Germany October 21 -25, 2019: *"Estimating the value of cultural ecosystem services for the United States."*

- National Outdoor Recreation Conference: Storytelling in Outdoor Recreation People, Places, Landscapes, Cultures, Rapid City, South Dakota May 6-9, 2019: *"Leveraging social media to map America's recreational areas."*
- ACES (A Community on Ecosystem Service) 2018, Washington, D.C., Dec 3-6, 2018: *"EnviroAtlas's national assessment of cultural ecosystem services: Leveraging social media to understand America's most valued landscapes."*
- US-IALE 2018 Annual Meeting, Chicago, Illinois, April 8-12, 2018: *"EnviroAtlas's national assessment of cultural ecosystem services: Leveraging social media to understand America's most valued landscapes."*
- Ecosystem Services Partnership (ESP) world conference, Shenzhen, China, Dec. 11-13, 2017: *"Mapping Cultural Ecosystem services for the continental US using Social Media."*
- US-IALE 2017 Annual Meeting, Baltimore, Maryland, April 9-13, 2017: *"Leveraging social media to analyse and map landscape values and perceptions."*
- NC GIS Conference "30 Rocks GIS", Raleigh, North Carolina, February 22-24, 2017: *"The FUTURES model: A open-source tool for understanding where cities will grow and how it will impact economic development and conservation".*
- 3rd Open Science Meeting – Global land project, Beijing, China October 24–27, 2016: *"The future of Ecosystem Service provisioning at the urban fringe: What have we learned from simulating urban growth strategies using the FUTURES model?"*.
- US-IALE 2016 Annual Meeting, Asheville, North Carolina, April 3-7, 2016: *"Scaling future urban change: Simulation of urbanization scenarios across the southern Atlantic States, U.S."*
- 9th IALE World Congress, Portland, Oregon, July 5–10, 2015: *"Mapping and quantifying cultural ecosystem services at continental and global scales using spatial scraping of web content"*.
- 2nd Open Science Meeting – Global land project, Berlin, Germany, March 19–21, 2014: *"Using Agent Based Models and backcasting exercises for understanding social and environmental tradeoffs"*.
- AAG Annual Meeting, Los Angeles, April 9–13, 2013: *"A comparison of methods to define agent typologies in land-change research"*.
- 4th Ecosystem Service Partnership Conference. Wageningen, Netherlands, October 4–7, 2011: *"Spatial quantification and valuation of cultural ecosystem services in a Dutch case study area"*.
- 1st Open Science Meeting – Global land project, Arizona, USA. October 17–19, 2010: *"The use of scenarios and photo realistic images for understanding landscape change possibilities"*.
- 2nd Eurogeo meeting, Bratislava, Slovakia, August 13–16, 2009: *"Assessing rural development options using spatially explicit methods"*.
- 1st International conference on geographies of children, youth & families, Reading, UK, September 9–13, 2008: *"Rural Cambodian Youth: Changing lives, changing perspectives"*.

Organized Conference Sessions & Workshops

07/2024	I-GUIDE Mid-Career Workshop July 2024, Minneapolis, MN	Minneapolis, MN
	Mid-Career Workshop: <i>"Navigating Geospatial Data Science"</i>	
4/2024	IALE-North American Annual Meeting	Oklahoma City, Oklahoma
	Special Symposium: <i>"Leveraging AI Advances in Landscape Ecology"</i>	
3/2023	IALE-North American Annual Meeting	Riverside, California
	Special Symposium: <i>"Citizen Science and PPGIS Approaches for the Study of Landscapes"</i>	
11/2022	1st annual SEAS Hackathon	Ann Arbor, Michigan
	Special Symposium: <i>"Social media and visualization for hacking sustainability"</i> , School for the Environment and Sustainability	
4/2022	IALE-North American Annual Meeting	Riverside, California
	Special Symposium: <i>"Novel digital approaches for the study of landscapes: gamification, immersive technologies and big data"</i> , Virtual	
4/2022	IALE-North American Annual Meeting	Riverside, California
	Workshop Organizer: <i>"Accessible Coding Methods for Gathering Social Media Dataset to Assess Landscapes"</i> , Virtual	
4/2020	IALE-North American Annual Meeting	Toronto, Canada
	Special Symposium: <i>"Novel digital technologies, big data and geovisualization approaches for understanding landscapes"</i> , Virtual	
4/2018	IALE-North American Annual Meeting	Chicago, Illinois
	Special Symposium: <i>"Taking a look under the hood of EPA's EnviroAtlas: Ecosystem services, data and tools"</i>	

4/2017	IALE-North American Annual Meeting Special Symposium: <i>"Integrated Modeling for the Analysis of Socio-Ecological Systems"</i>	Baltimore, Maryland
10/2016	3rd Open Science Meeting – Global land project Special Symposium: <i>"Coupling Dynamic Land-Change Models with Ecosystem Service Evaluation"</i>	Beijing, China
4/2016	IALE-North American Annual Meeting Special Symposium: <i>"Modeling with Stakeholders"</i>	Asheville, North Carolina
4/2016	IALE-North American Annual Meeting Workshop organizer: <i>"Spatio-temporal Modeling with Open Source GIS"</i>	Asheville, North Carolina

SERVICE

Editorial & Review Boards

2019 – 2023	Guest Editor Assessing cultural ecosystem services through crowdsourced data from social media. Volume 60, April 2023, 101518	Ecosystem Services
2016 – 2018	Guest Editor Special Issue on Assessment and Valuation of Recreational Ecosystem Services of Landscapes. Volume 31, Part C, June 2018, Pages 289-295.	Ecosystem Services
2019	Reviewer 4th Open Science Meeting of the Global Land Programme April 24-26 Bern, Switzerland	Ecosystem Services

Reviewer

I have served as a reviewer for a range of journals across environmental science, geography, and sustainability. I have occasionally (low) reviewed for *Agriculture, Ecosystems and Environment*, *Ambio*, *Applied Geography*, *Conservation Letters*, *Ecological Indicators*, *Ecosystems*, *Environmental Modelling and Software*, *Frontiers in Ecology and the Environment*, *Global Environmental Change*, *Integrative Journal of Environmental Sciences*, *International Journal of Biodiversity*, *Ecosystem Services & Management*, *Land*, *Landscape Research*, *Nature Cities*, *Nature Sustainability*, and *Star Protocols*. I frequently (medium) review for *Ecosystem Services* and *Land Use Policy*, and I have reviewed most often (high) for *Landscape and Urban Planning*.

Service to Department, School and University

2022 –	MiDAS Member I am member of MiDAS and my responsibilities include fellow mentorship, and admissions. The Michigan Institute for Data Science strengthens the University of Michigan's preeminence in Data Science and Artificial Intelligence and enables their transformative use in a wide range of research disciplines to achieve lasting societal impact.	The Michigan Institute for Data Science
2021 –	SEAS co-representative to GLISA I am Co-PI of the NOAA funded GLISA project. My duties encompass leadership and organization of the program, peer-review of our small grant program, monthly participation in project meetings, and representing GLISA at various state and federal departments and outreach activities. GLISA works at the boundary between climate science and decision making, striving to enhance Great Lakes communities' capacity to understand, plan for, and respond to climate impacts now and in the future.	University of Michigan, SEAS
2019 –	Specialization Member I was part of the rebranding effort for our specialization, a successful change from Environmental Informatics to Geospatial Data Sciences. Our rebranding efforts have increased the profile of our specialization's unique data science approach to spatial and sustainability questions, and we have seen larger enrollment as a result.	University of Michigan, SEAS
2019 – 2022	Senate Faculty Representative As an elected faculty senate member, I have represented SEAS in Faculty Senate meetings, providing input on issues of university concern, and communicating issues to the Faculty Senate Chair, and Faculty Senate Office.	University of Michigan
2014 – 2017	Website developer Conceptualization and content creator for the Land dynamics website	Center for Geospatial Analytics, NCSU

2013–2014	Website manager Conceptualization and content creator for the Appalachian Ohio research group	The Ohio State University, Dept. of Geography
2011	Organizing Committee Organizing Committee: graduate field course: <i>Quantifying and Mapping Ecosystem services</i>	VU University
2009	Organizing Committee (Treasurer) Graduate course: <i>Getting to the bottom of Mount: Kenya Analysis of land dynamics and sustainability</i>	Wageningen University

Memberships

- International Association for Landscape Ecology
- Ecosystem Service Partnership
- Global Land Project

Experience on Funded Grants and Projects

2021 – 2026	GLISA Phase III Lead and Participant: Project 4A: Simulating Multiple and Emerging Stressors for Adaptation Planning Project 5A: Understanding the Role of Stakeholder Diversity on Fit, Legitimacy, and Equity of Co-Produced, Climate-Driven Knowledge (Maria C.L); and Project 6A: Assessing the Role of Co-produced Knowledge in Building Adaptive Capacity (Scott K.)	NOAA
2018 – 2019	PI: Thriving Earth Exchange project "New Orleans's 7th Ward Healthy Community Services initiative: Community engagement for understanding the benefits of neighborhood greenspace"	American Geophysical Union
2014 – 2015	NCSU "SMART-SLEUTH: Augmenting the SLEUTH Urban Growth Model with New Smart-Growth Scenario-Building Capabilities"	Investigator: South Atlantic Landscape Conservation Cooperative
2012 – 2014	National Science Foundation (BCS-1010314) Investigator: "Explaining Socioecological Resilience Following Collapse: Forest Recovery in Appalachian Ohio"	The Ohio State University
2013 – 2015	Research Project Investigator: "Rural forest communities at a tipping point? Trends and actionable research opportunities"	National Socio-Environmental Synthesis Center (SESYNC)
2008 – 2011	7th framework project in the EU Investigator: "Rural future networks"(Social Science and Humanities, Contract no. 217381)	Wageningen University

PRESS AND OTHER MEDIA

- The Guardian. Sept 22, 2024. A break from the heat': Americans most affected by climate crisis head midwest. Stephen Starr [LINK](#)
- Great Lakes Echo. March 18, 2024. Are Great Lakes cities ready for climate migrants? Kayla Nelsen. [LINK](#)
- Stewards Magazine. Fall 2023 issue. Meet the Future: Big Data and Sustainability Solutions. Nayiri Mullinix. [LINK](#)
- Stewards Magazine. Summer 2023 issue. Using AI to Accelerate Wildlife Conservation Efforts. Lori Atherton. [LINK](#)
- Council of the Great Lakes Region and MLive Webinar. May 18, 2023. Climate Migration Webinar – Is the Great Lakes Region a Climate Haven?. Keynote speaker. [LINK](#)
- The University Record. October 11, 2022. Tool helps Great Lakes region plan for climate-change migrants. Jim Erickson, Michigan News. [LINK](#)
- Fox 2, Detroit. October 13, 2022. Map shows why more people could move to Michigan, Great Lakes in future. Jack Nissen. [LINK](#)
- Michigan Radio, NPR. October 7, 2022. Researchers developing tools to help region plan for potential climate change-related population growth. Emily Blumberg. [LINK](#)

- WEMU News, 89.1. October 10, 2022. Climate migrants could come to Great Lakes region as extreme weather grows in coming years. Josh Hakala. [LINK](#)
- NBC LX News. April 20, 2022. Is the Great Lakes Region Ready for an Influx of Climate Migrants? Jalyn Henderson. [LINK](#)
- Steward Magazine, SEAS. Game ON: Designing high-performing novel landscapes to tackle climate change. Denise Spranger. [LINK](#)
- Downtown Newsmagazine, Birmingham Bloomfield. Mar 29, 2022. Climate haven: Will Michigan be a future refuge? Stacy Gittleman. [LINK](#)
- UM Sustainable Food Systems Initiative, Fast Food for Thought and Food Literacy for All. April 13, 2022. Why Trees are so Important for Urban Agriculture in Frontline Communities. Derek Van Berkel. [LINK](#)
- Popular Science. October 27, 2019. Your 'basic' fall leaf photos could serve as evidence of climate change, Vacation albums are a surprising way to track shifts in the seasonal calendar. Stephanie Spera. [LINK](#)
- Science Daily. November 1, 2016. Social media photos priceless for natural resources research: Instagram, Flickr, Panoramio reveal most valued features of European landscapes. [LINK](#)
- Eureka, AAAS. October 31, 2016. Your vacay photo social media posts help science says Utah State University researcher Scientists use popular photo-sharing platforms to identify landscape 'hotspots'. [LINK](#)

LANGUAGES

English – Native

Dutch – Proficient