Jamon Van Den Hoek, PhD

Associate Professor of Geography
Principal Investigator, Conflict Ecology lab
College of Earth, Ocean, and Atmospheric Sciences
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BACKGROUND

Education

Ph.D. (2012)	**Geography**, University of Wisconsin-Madison. Thesis: *Mosaics of Change: Cross-Scale Forest Cover Dynamics and Drivers in Tibetan Yunnan, China*
M.Sc. (2005)	**Civil and Environmental Engineering**, University of Wisconsin-Madison. Thesis: *Geographic Information Systems: Modeling and Analytical Shortcomings within a Landscape Archaeological Case Study*
B.Sc. (2004)	**Civil and Environmental Engineering**, University of Wisconsin-Madison
B.A. (2004)	**Classical Humanities** with **Certificate in Archaeology**, University of Wisconsin-Madison

Professional Experience

2021-present	**Associate Professor**, Geography Program, College of Earth, Atmospheric, and Oceanic Sciences (CEOAS), Oregon State University
2015-2021	**Assistant Professor**, Geography Program, College of Earth, Atmospheric, and Oceanic Sciences (CEOAS), Oregon State University (6 years)
2021	**Consultant**, International Red Cross/Red Crescent Centre on Climate Change and Disaster Preparedness (3 months)
2021	**Consultant**, Amnesty International (3 months)
2020-present	**Consultant**, UNICEF Office of Research – Innocenti. Florence, Italy (Remote)
2018-2021	**Visiting Research Fellow**, Centre for Research Architecture, Department of Visual Cultures, Goldsmiths, University of London
2018	**Visiting Professor**, UN World Food Programme Vulnerability Analysis and Mapping, Rome, Italy (3 months)
2016	**Adjunct Associate Research Scholar**, Graduate School of Architecture, Planning & Preservation (GSAPP), Columbia University (3 months)
2012-2015	**NASA Postdoctoral Fellow**, Biospheric Sciences Laboratory, NASA Goddard Space Flight Center, Greenbelt, MD. Advisers: Jeff Masek & Compton (Jim) Tucker (3 years)
2010-2011	**Visiting Researcher**, Geomatics Lab, Humboldt University-Berlin. Adviser: Patrick Hostert (9 months)
2007-2010	**NSF Integrative Graduate Education and Research Traineeship (IGERT) Trainee**, University of Wisconsin-Madison. Advisers: A-Xing Zhu & Matt Turner (3 years)

RESEARCH GRANTS

$1.7M in direct grant support
$5.7M in total collaborative grant support

2022	**Principal Investigator**. Satellite Monitoring of Informal Settlement Dynamics and Displaced Person Mobility in the Complex Humanitarian Crisis of Tigray, Ethiopia. NASA Rapid Response Program & NASA Disasters Program
2022	**Co-Principal Investigator**. The Humanitarian Displacement Data Network (HDDN). Norwegian Centre for Humanitarian Studies Dynamics Seed Funding
2021	**Co-Principal Investigator**. *Modeling interactions between community forest dynamics and local livelihoods amidst institutional changes*. NSF Dynamics of Integrated Socio-Environmental Systems (DISES) Program – PI: Reem Hajjar (Oregon State University)
2020	**Principal Investigator**, *Charting new pathways to peace: A systematic, comparative analysis of environmental peacebuilding conditions, mechanisms, and outcomes*. United States Institute of Peace - Environment, Conflict, and Peacebuilding Grant (Advanced Research Project)

2019   **Collaborator**, *The Effects of Migration on Settlements and Urbanisation in Ethiopia and Sudan.* Royal College of Art Research and Knowledge Exchange Development Fund (RS2)

2018   **Co-Principal Investigator**, *Securing Sustainable Seas: Near Real-Time Monitoring and Prediction of Global Fishing Fleet Behavior,* NASA Biodiversity & Ecological Forecasting Program, PI: James Watson (Oregon State Univ.)

2018   **Co-Principal Investigator**, *The Global Refugee Atlas.* The National Geographic Society's Committee for Research and Exploration

2018   **Collaborator**, *Connecting earth Observations to decision Makers for Preparedness ActionS.* NASA Rapid Response and Novel Research in Earth Science, PI: Andrew Kruczkiewicz (Columbia Univ.)

2017   **Principal Investigator**, *Mapping the Missing Millions: Developing a global database of informal settlement location, schema, and SDG indicators.* NASA Applied Sciences GEO Work Programme

2017   **Co-Investigator**, *The agrarian transition in Mainland Southeast Asia: Changes in rice farming—1995 to 2018.* NASA Land-Cover/Land-Use Change (LCLUC), PI: Jefferson Fox (East-West Center)

2017   **Co-Principal Investigator**, *Expanding Access to Data-Intensive Remote Sensing Algorithms through Collaboration with the SES Research Community.* NSF Socio-Environmental Synthesis Center (SESYNC), Co-PI: Michael Alonzo (American Univ.)

2017   **Co-Investigator**, *Human-Geospatial Data Interaction: Leveraging Virtual Reality to Extend Teaching and Learning in Geovisualization.* Oregon State University Learning Innovation Grant, PI: Bo Zhao (Oregon State Univ.)

2016   **Investigator**, *Mapping Falklands and South Georgia coastal margins for Spatial Planning.* Darwin Initiative, Darwin Plus Overseas Territories Environment and Climate Fund, PIs: Paul Brickle & Tara Pelembe (South Atlantic Environmental Research Institute (SAERI)

2016   **Collaborator**, *A West Africa LDAS for Forecasting Extreme Hydrological Events (WALFEHE).* NASA SERVIR. PI: Augusto Getirana (Univ. of Maryland-College Park)

2016   **Principal Investigator**, *GAZE: Geospatial Analysis and visualiZation for Education.* Oregon State University Scaled Learning Innovation Grant

2016   **Co-Investigator**, *A Jupyter server for the Oregon State University Climate Science Program.* Unidata Community Equipment Awards, PI: Karen Shell (Oregon State Univ.)

2016   **Collaborator**, *Conflict Urbanism*, Mellon Humanities Grant, PI: Laura Kurgan (Columbia Univ.)

2015   **Co-Investigator**, *Twenty-Five Years of Community Forestry: Mapping Forest Dynamics in the Middle Hills of Nepal.* NASA Land-Cover/Land-Use Change (LCLUC), PI: Jefferson Fox (East-West Center)

2015   **Principal Investigator**, *Supporting Near Real-Time Reservoir Dynamics Monitoring with USGS Satellite Data.* USGS Water Resources Research Institute

2015   **Co-Investigator**, Knight Foundation Prototype Fund, *Conflict Analysis Toolbox (CAT),* with Laura Kurgan and Madeeha Merchant (Columbia Univ.)

2014   **Co-Principal Investigator**, NSF Socio-Environmental Synthesis Center (SESYNC) Computational Summer Institute Grant, with Brian Robinson (McGill Univ.)

INTERNATIONAL EXHIBITIONS
2019   *Satellite Disparities.* Sharjah Architecture Triennial, Sharjah, United Arab Emirates. November 9-12, 2019 (link)

FELLOWSHIPS & AWARDS
2012   NASA Postdoctoral Program Fellowship administered by Oak Ridge Associated Universities (3 years)

2012   Wisconsin Institutes for Discovery Emerging Interfaces Award

2010   UW-Madison Vilas Research Travel Award

2008   UW-Madison Department of Geography Trewartha Graduate Research Award

2008   Foreign Language Area Studies (FLAS) Summer Fellowship, Intermediate Mandarin

2007   NSF Integrative Graduate Education and Research Traineeship (IGERT)

2007   American Congress on Surveying and Mapping (ACSM) Best Interactive/Digital Map, Professional Category (Runner-Up)

2007   University of Wisconsin-Madison Vice Chancellor for Administration's Best Practice Award
2006   American Society for Photogrammetry and Remote Sensing (ASPRS) Paul Wolf Memorial Scholarship

PUBLICATIONS (*graduate student advisee)

Refereed Articles

1. Fein, F.* & **Van Den Hoek, J.** (2022). Do refugee camps offer a refuge from conflict? A spatially explicit analysis of conflict incidence at 1,543 refugee locations across Africa (1997-2020). *Frontiers in Human Dynamics.* https://doi.org/10.3389/fhumd.2022.857250

2. Chhetri, R., Yokying, P., Smith, A. C.*, **Van Den Hoek, J.**, Hurni, K., Saksena, S., & Fox, J. (2021). Forest, agriculture, and migration: Contemplating the future of forestry and agriculture in the Middle-Hills of Nepal. *Journal of Peasant Studies.* https://doi.org/10.1080/03066150.2021.1978983

3. **Van Den Hoek, J.**, Friedrich, H.* (2021). Satellite-Based Human Settlement Datasets Inadequately Detect Refugee Settlements: A Critical Assessment at Thirty Refugee Settlements in Uganda. *Remote Sensing.* https://doi.org/10.3390/rs13183574 (Invited submission for Special Issue on "Mapping Human-Settlements from, between, and beyond Remotely-Sensed Observations")

4. Alonzo, M., **Van Den Hoek, J.,** Murillo-Sandoval, P.*, Steger, C., Zinda, J. A. (2021). Mapping and quantifying land cover dynamics using dense remote sensing time series with the user-friendly pyNITA software. *Environmental Modelling and Software*. https://doi.org/10.1016/j.envsoft.2021.105179

5. Xu, C., Hystad, P., Chen, R., **Van Den Hoek., J.**, Hutchinson, R. Hankey, S. & Kennedy, R. E. (2021). Application of training data affects success in broad-scale local climate zone mapping. *International Journal of Applied Earth Observation and Geoinformation*. https://doi.org/10.1016/j.jag.2021.102482

6. **Van Den Hoek, J.**, Smith, A. C.*, Hurni. K., Saksena, S. & Fox, J. (2021). Shedding New Light on Mountainous Forest Growth: Evaluating the effects of topographic illumination correction on 25 years of Landsat-based forest cover change across Nepal. *Remote Sensing.* https://doi.org/10.3390/rs13112131

7. Wickramarathna S., **Van Den Hoek, J.**, & Strimbu, B.M. (2021). Automated Detection of Individual Juniper Tree Location and Forest Cover Changes Using Google Earth Engine. *Annals of Forest Research*. https://www.afrjournal.org/index.php/afr/article/view/2145

8. Murillo-Sandoval, P.*, Gjerdseth, E., Correa-Ayram, C., Wrathall, D., **Van Den Hoek, J.**, Davalos, L., Kennedy, R. E. (2021). No peace for the forest: Rapid, widespread land changes in the Andes-Amazon region following the Colombian civil war. *Global Environmental Change*. https://doi.org/10.1016/j.gloenvcha.2021.102283

9. Hunter, L. M., Koning, S., Fussell, E., King, B., Rishworth, A., Merdjanoff, A., Muttarak, R., Riosmena, F., Simon, D., Skope, E., & **Van Den Hoek, J.** (2021). Scales and Sensitivities in Climate Vulnerability, Displacement and Health. *Population and Environment*, *43*(1), 61–81. https://doi.org/10.1007/s11111-021-00377-7

10. **Van Den Hoek, J.**, Friedrich, H.K.*, Ballasiotes, A.*, Peters, L.E.R., & Wrathall, D. (2021). Development after Displacement: Evaluating the Utility of OpenStreetMap Data for Monitoring Sustainable Development Goal Progress in Refugee Settlements. *ISPRS International Journal of Geo-Information, 10(3)*, 153. https://doi:10.3390/ijgi10030153 (Invited submission for Special Issue on "OpenStreetMap as a Multi-Disciplinary Nexus: Perspectives, Practices, and Procedures").

11. Friedrich, H.K.* & **Van Den Hoek, J.** (2020). Breaking Ground: Automated Disturbance Detection with Landsat Time Series Captures Rapid Refugee Settlement Establishment and Growth in North Uganda. *Computers, Environment and Urban Systems* 82. https://doi.org/10.1016/j.compenvurbsys.2020.101499

12. Maystadt, J.-F., Mueller, V., **Van Den Hoek, J.**, van Weezel, S. (2020). Vegetation changes attributable to refugees in Africa coincide with agricultural deforestation. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/ab6d7c

13. Murillo-Sandoval, P.*, Van Dexter, K., **Van Den Hoek, J.**, Wrathall, D., & Kennedy, R. (2020). The end of gunpoint conservation: Forest disturbance after the Colombian peace agreement. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/ab6ae3

14. Steger, C., Nigussie, G., Alonzo, M., Klein, J., Dullo, B.W., **Van Den Hoek, J.**, Gelaw, M.F., Evangelista, P. (2020). Knowledge Co-production Improves Understanding of Environmental Change in the Ethiopian Highlands. *Ecology and Society* 25(2):2. https://www.ecologyandsociety.org/vol25/iss2/art2/

15. Getirana, A., Jung, H.C., **Van Den Hoek, J.**, Ndehedehee, C.E. (2020). Hydropower dam operation strongly controls Lake Victoria's freshwater storage variability. *Science of the Total Environment.* https://doi.org/10.1016/j.scitotenv.2020.138343

16. **Van Den Hoek, J.,** Getirana, A., Jung, H., Okeowo, M. A., & Lee, H. (2019). Monitoring reservoir drought dynamics with Landsat and radar/lidar altimetry time series in persistently cloudy eastern Brazil. *Remote Sensing, 11*(7), 827. https://doi.org/10.3390/rs11070827

17. Hurni. K., **Van Den Hoek, J.**, & Fox, J. (2019). Assessing the spatial, spectral, and temporal consistency of topographically corrected Landsat time series composites across the mountainous forests of Nepal. *Remote Sensing of Environment.* https://doi.org/10.1016/j.rse.2019.111225

18. Fox, J., Saksena, S., Hurni, K., **Van Den Hoek, J.**, Smith, A. C.*, Chhetri, R., & Sharma, P. (2019). Mapping and Understanding Changes in Tree Cover in Nepal: 1992 to 2016. *Journal of Forests and Livelihoods*, *18*(1), 1-11.

19. Kugler, T., Grace, K., de Sherbinin, A., Wrathall, D., Van Riper, D., Adamo, S., Aubrecht, C., Cervone, G., Comer, D., Engstrom, R., Hultquist, C., Gaughan, A., Linard, C., Moran, E., Stevens, F., Tatem, A., Tellman, B., **Van Den Hoek, J.** (2019). People & Pixels 20 years later: The current data landscape and research trends blending population and environmental data. *Population and Environment*. https://doi.org/10.1007/s11111-019-00326-5

20. Woolway, R. I., Merchant, C. J., **Van Den Hoek, J.**, Azorin-Molina, C., Nõges, P., Laas, A., Mackay, E., & Jones, I. D. (2019). Atmospheric stilling amplifies lake thermal responses to global warming. *Geophysical Research Letters.* https://doi.org/10.1029/2019GL082752

21. Shaffer, L. J., Khadka, K. K., **Van Den Hoek, J.**, & Naithani, K. J. (2019). Human-Elephant Conflict: A Review of Current Management Strategies and Future Directions. *Frontiers in Ecology and Environment.* https://doi.org/10.3389/fevo.2018.00235

22. Murillo-Sandoval, P.*, Hilker, T., Krawchuk, M., & **Van Den Hoek, J.** (2018). Detection and attribution of forest disturbance and drivers in the Colombian Andes. *Forests*, 9(5), 269*.* https://doi.org/10.3390/f9050269

23. Kosten, S., van den Berg, S., Mendonca, R., Reinaldo, J., Roland, F., Sobek, S., **Van Den Hoek, J.**, & Barros, N. (2018). Extreme drought boosts CO2 and CH4 emissions from reservoir drawdown areas. *Inland Waters*. https://doi.org/10.1080/20442041.2018.1483126

24. Murillo-Sandoval, P.*, **Van Den Hoek, J.**, & Hilker, T. (2017). Leveraging Multi-Sensor Time Series Datasets to Map Short- and Long-Term Tropical Forest Disturbances in the Colombian Andes. *Remote Sensing,* 9(2), 179. doi:10.3390/rs9020179

25. Montesano, P.M., Neigh, C., Sun, G., Duncanson, L., **Van Den Hoek, J.**, & Ranson, J. (2017). The use of sun elevation angle for stereogrammetric forest height in open canopies. *Remote Sensing of Environment, 196,* 76-88. doi:10.1016/j.rse.2017.04.024

26. Alonzo, M., **Van Den Hoek, J.**, & Ahmed, N. (2016). Capturing coupled riparian and coastal disturbance from industrial mining using cloud-resilient satellite time series analysis. *Scientific Reports*, 6, 35129. doi: 10.1038/srep35129.

27. **Van Den Hoek, J.**, Read, J. S., Winslow, L. A., Montesano, P. M., & Markfort, C. D. (2015). Examining the utility of broad-scale satellite-based wind sheltering estimates for lake-level hydrodynamic modeling. *Remote Sensing of Environment*, 156, 551-560. doi: 10.1016/j.rse.2014.10.024

28. **Van Den Hoek, J.**, Burnicki, A., Ozdogan, M., & Zhu, A. (2015). Using a landscape ecology-based analysis to examine the success of forest policy implementation in Southwest China. *Landscape Ecology*, 30(6). doi: 10.1007/s10980-015-0171-y

29. Read, E., Bucknell, M., Hines, M., Kreft, J., Lucido, J., Read, J., Schroedl, C., Sibley, D., Stephan, S., Suftin, I., Thongsavanh, P., **Van Den Hoek, J.**, Walker, J., Wernimont, M., Winslow, L., & Yan, A. (2015). New Insight Into California's Drought Through Open Data. *BayGeo Journal*, Summer, http://journal.baygeo.org/new-insight-into-californias-drought-through-open-data/

30. Read, J.S., Winslow, L.A., Hansen, G.J., **Van Den Hoek, J.**, Hanson, P.C., Bruce, L.C., & Markfort, C.D. (2014). Simulating 2368 temperate lakes reveals weak coherence in stratification phenology. *Ecological Modelling*, 291, 142-150. doi: 10.1016/j.ecolmodel.2014.07.029

31. **Van Den Hoek, J.**, Ozdogan, M., Burnicki, A., & Zhu, A. (2014). Evaluating forest policy implementation effectiveness with a cross-scale remote sensing analysis in a priority conservation area of Southwest China. *Applied Geography*, 47, 177-189. doi: 10.1016/j.apgeog.2013.12.010

32. **Van Den Hoek, J.**, Baumgartner, J., Doucet-Beer, E., Hildebrandt, T., Robinson, B.E., & Zinda, J.A. (2012). Understanding the Challenges and Rewards of Social-Ecological Research in China. *Society and Natural Resources*, 25(12). doi: 10.1080/08941920.2012.658985

33. Roth, R.E., **Van Den Hoek, J.**, Woodruff, A., Erkenswick, A., McGlynn, E., & Przbylowski, J. (2009). The 21st Century Campus Map: Mapping the University of Wisconsin-Madison. *Journal of Maps*, 5, 1-8. doi: 10.4113/jom.2009.1036

Non-Refereed Articles
34. Watson, J., Peters, L. E. R., **Van Den Hoek, J.** (2020). Supersystem Risk and the End of the Anthropocene. *TERA Journal, 1.* https://tera.institute/supersystem-risk-and-the-en-of-the-anthropocene/

Book Chapters
35. Wrathall, D. & **Van Den Hoek, J.** (2022). Water stress and migration in Asia. In. L. M. Hunter, C. Gray, & J. Verson (Eds.). *International Handbook of Population and Environment*. Springer. https://link.springer.com/chapter/10.1007/978-3-030-76433-3_9

36. **Van Den Hoek, J.** (2021). The City is the Medium and Satellite Imagery are a Prism: Conceptualizing Urban Conflict Damage Monitoring with Multitemporal Remote Sensing Data. In X. Yang (Ed.). *Urban Remote Sensing: Monitoring, Synthesis and Modelling in the Urban Environment*. John Wiley & Sons. 2nd edition. https://onlinelibrary.wiley.com/doi/10.1002/9781119625865.ch15

37. Peters, L.E.R. & **Van Den Hoek, J.** (2021). Charting Justice in Relocation for the World's Refugees. In A.R. Siders & I. Ajibade (Eds.), *Global Views on Climate Relocation and Social Justice: Navigating Retreat*. Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781003141457-4/charting-justice-based-approach-planned-climate-relocation-world-refugees-laura-peters-jamon-van-den-hoek

38. **Van Den Hoek, J.** (2019). Satellite Disparities. In Lahoud, A. (Ed.) *Conditions.* Sharjah Architecture Triennial.

39. **Van Den Hoek, J.** (2017). By Any Lens Necessary: A Satellite Image Account of Conflict. In *The Noise of Being* (pp. 142-149). Amsterdam, the Netherlands: SonicActs Publications. (link)

40. **Van Den Hoek, J.**, & Aylward, W. (2013). Geophysics. In W. Aylward (Ed.), *Excavations at Zeugma* (pp. 232-246). Los Altos, CA: The Packard Humanities Institute. (PDF)

Books
41. **Van Den Hoek, J.** (2014). *Shangri-La Allure.* Washington, DC: self-published. (link)

Conference Papers
42. **Van Den Hoek, J.**, Wrathall, D., & Friedrich, H. (2021). A Primer on Refugee-Environment Relationships. Background paper for the Contribution to Population-Environment Research Network (PERN) Cyberseminar, "Refugee and internally displaced populations, environmental impacts and climate risks" (10-18 May 2021). (PDF)

43. **Van Den Hoek, J.** (2018). War is a Land Use. Contribution to Population-Environment Research Network (PERN) Cyberseminar, "People and Pixels Revisited" (20-27 February 2018). (PDF)

Reports & Briefings
44. Wrathall, D., Peters, L.E.R., **Van Den Hoek, J.**, Abel, K., & Black, B. (2020). Empowering mobility when moving isn't a choice. In *Our Future on Earth 2020: Science Insights into our Planet and Society* (pp. 44-49). Future Earth. (PDF)

45. Levidis, S., Limeburner, R., **Van Den Hoek, J.** (2019). Spatial Analysis of Audiovisual, Cartographic and Meteorological Evidence Regarding the Agathonissi Shipwreck, 16-17/03/2018, *Report for the Maritime Court of Piraeus, Greece*, submitted 20/06/2019.

46. Wrathall, D., **Van Den Hoek, J.,** Walters, A., & Devenish, A.* (2018). Water stress and human migration: a global, georeferenced review of empirical research. *United Nations Food and Agriculture Organization (UN FAO) Land and Water Discussion Paper #11* http://www.fao.org/3/i8867en/I8867EN.pdf

47. **Van Den Hoek, J.** (2017). Agricultural market activity and Boko Haram attacks in northeastern Nigeria. *West African Papers, No. 9,* OECD Publishing, Paris. http://dx.doi.org/10.1787/13ba9f2e-en
48. Weizman, E., Varvia, C., Axel, N., Sebregondi, F., Burns, J., Molavi, S. C., Toftgaard, G. A., Sotomayor, C. E., Van Gool, V., Panagiotopoulou, D., **Van Den Hoek, J.**, Güiraldes, R., Halabi, H., Abdullah, M., Klish, K., de Souza, A. N., Schuppli, S., & Pines, J. (2015). 'Black Friday': Carnage in Rafah During 2014 Israel/Gaza Conflict. *Amnesty International*. doi: 10.13140/RG.2.1.3756.2004

PUBLIC SCHOLARSHIP

2022   A geographer explains how satellites give an important—but partial—picture of the war in Ukraine. *Fast Company.* https://www.fastcompany.com/90740023/a-geographer-explains-how-satellites-give-an-important-but-partial-picture-of-the-war-in-ukraine

2019   1) Conquer and Divide: The Shattering of Palestinian Space by Israel. https://conquer-and-divide.btselem.org
        2) The Global Refugee Atlas. https://hgis.uw.edu/refugee/

2015   Weizman, E. & Sheikh, F. (2015). *Erasure: The Conflict's Shoreline*. Göttingen, Germany: Steidl.
        Wines, M. (2015, Apr 12). Mighty Rio Grande Now a Trickle Under Siege. *The New York Times.* www.nytimes.com/2015/04/13/us/mighty-rio-grande-now-a-trickle-under-siege.html
        California drought, visualized with open data https://cida.usgs.gov/ca_drought/

2014   The Most Ambitious Environmental Lawsuit Ever. *The New York Times Magazine*. www.nytimes.com/interactive/2014/10/02/magazine/mag-oil-lawsuit.html
        Assessing the Damage and Destruction in Gaza. *The New York Times*. www.nytimes.com/interactive/2014/08/03/world/middleeast/assessing-the-damage-and-destruction-in-gaza.html

TEACHING, INSTRUCTION AND COURSE DESIGN

Assistant Professor, Oregon State University (2015-present)
>   Geography 301 Map and Image Interpretation
>   Geography 360 Introduction to Geographic Information Systems
>   Geography 464/564 Critical Geospatial Perspectives
>   Geography 481/581 Satellite Image Analysis
>   Geography 699 Geography of Survival

Lecturer and Senior Teaching Assistant, University of Wisconsin-Madison (2005-2012, 6 academic terms in total)
>   Geography 170 Our Digital Globe: Introduction to Geographic Information Science
>   Geography 378 Introduction to Geocomputing
>   Geography 377 Introduction to Geographic Information Systems
>   Civil & Environmental Engineering 301 Introduction to Remote Sensing Systems
>   Engineering Summer Program

Workshop Design & Delivery

Oct 2021   *Designing and Undertaking Programmatic Evaluations of Environmental Peacebuilding Initiatives.* Environmental Peacebuilding Association. (link)

Sept 2021   *Open EO Mapping of SDG Indicators at Refugee Settlements*. FOSS4G. Buenos Aires. (link)

Jun 2019   *Remote Sensing Principles & Theory for Humanitarian Applications*. Harvard Humanitarian Initiative. Cambridge, MA

Nov 2018   *Hands-on training session with forest cover products in Google Earth Engine*. An international meeting on Twenty-five years of community forestry, Kathmandu, Nepal (site and news)

Oct 2018   *A Primer on Conflict Theory and Datasets*. World Food Programme Vulnerability Analysis and Mapping Unit. Rome, Italy (video)

Sept 2018   NASA Space Apps Challenge, *The Land Where Displaced People Settle*. https://2018.spaceappschallenge.org/challenges/what-world-needs-now/land-where-displaced-people-settle/details

Sept 2018	1) *Food Security Applications of Google Earth Engine*. WFP Vulnerability Analysis and Mapping Geospatial Remote Sensing Workshop, Rome, Italy
	2) *Principles of Remote Sensing*. WFP Vulnerability Analysis and Mapping Geospatial Remote Sensing Workshop, Rome, Italy
Oct 2017	*Introductory Google Earth Engine Workshop*. Goldsmiths, Univ. of London. London, UK
Feb 2015	*Conflict infrastructure: Remote sensing principles and applications in conflict case studies*. Columbia University Graduate School of Architecture, Planning and Preservation. New York, NY
Dec 2014	*Developing remote sensing tools for armed conflict analysis*. Goldsmiths, Univ. of London. London, UK
Oct 2014	*Extending the threshold of detection: Historical, theoretical, and methodological overview of remote sensing science.* Princeton University School of Architecture. Princeton, NJ
Nov 2013	*Cross-scale time-series analysis of land use/land cover change*. NASA LCLUC Science Team Meeting on Land Use and Water Resources in Central Asia. Tashkent, Uzbekistan

Instructional Facility Design and Management

| 2016-2018 | Geospatial Analysis and visualiZation for Education (GAZE) Facility at OSU |

ADVISING & MENTORSHIP
Graduate faculty member of 1) Geography, 2) Risk and Uncertainty Quantification in Earth Systems, 3) Sustainable Forest Management, 4) Water Resources Policy and Management, 5) Water Resources Science, 6) Natural Resources, and 7) Environmental Science

Student Advising & Mentorship

Current

PhD (3)

Alexander Smith: 2022 anticipated grad, Geography (Fulbright Fellow, Oregon State University Provost Fellow)

Jaimlyn Sypniewski: 2025 anticipated grad, Environmental Sciences

Corey Scher: 2023 anticipated grad, CUNY Earth and Environmental Sciences (external advisor)

MS (4)

Zachary Field: 2023 anticipated grad, Environmental Sciences

Jose Jibaja: 2022 anticipated grad, Natural Resources

Hannah Mizell: 2022 anticipated grad, Geography

Raul Munoz: 2022 anticipated grad, Natural Resources

Alumna

Anna Ballasiotes, MS 2020, Geography – *Mapping Untreated and Semi-treated Wastewater Effluent off the Coast of Gaza with Sentinel-1 Time Series Data* (link)

Yonathan Viquez Carrera, BS 2021, Earth Sciences

Frieda Fein, MS 2018, Geography – *Are Refugee Camps Refuges? A Spatially Explicit Analysis of Security Threats to African Refugee Camps (1997-2016)* (link)

Hannah Friedrich, MS 2019, Geography – *Breaking Ground: Automating the Detection of Refugee Settlement Establishment and Growth through Landsat Time Series Analysis with a Case Study in Northern Uganda* (link)

Quincy Gill, BS 2017, Geography

Sue Kyung (May) Hwang, MS 2019, Water Resources Policy & Management – *Alarming for Nothing?: A Geographic and Sentiment Analysis of Water Securitization in Academic Research* (link)

Elise Mazur, MS 2021, Geography - *Putting Food on the Map: Automated Mapping of Community Gardens with High Resolution Aerial Imagery using an Object Based Approach in Google Earth Engine*

Paulo Murillo-Sandoval, MS 2017, Forest Ecosystems and Society – *Leveraging Multi-Sensor Time Series Datasets to Map Short- and Long-Term Forest Disturbances and Drivers of Change in the Colombian Andes* (link)

PUBLIC PRESENTATION DESIGN & ORGANIZATION

Conference & Seminar

| May 2021 | *Refugee populations, environmental impacts, and climate risks.* People-Environment Research Network (PERN) Cyberseminar. (link) |

Oct 2019   *The Effects of Migration on Settlements and Urbanisation in Ethiopia, Uganda, and Sudan*. In partnership with Royal College of Art. Addis Ababa, Ethiopia

Oct 2019   *Climate change and national security for Jordan, Palestine, and Israel*. By Gidon Bromberg, Israeli Director and Co-Founder of EcoPeace Middle East (link). Oregon State University, Corvallis, Oregon

May 2018   *Earth's vital signs: Planetary-scale environmental monitoring with Google Earth Engine.* By Rebecca Moore, Director of Google Earth, Google Earth Engine, and Google Earth Outreach. Oregon State University, Corvallis, Oregon (link)

Nov 2018   *An International Meeting on Twenty-Five Years of Community Forestry in Nepal*. In partnership with the East-West Center. Kathmandu, Nepal (link)

Conference Session

Association of American Geographers (AAG) Annual Meeting

   2016   New geographies and spatialities of war and political violence I, II & III
   2015   Conflict ecology through an intradisciplinary lens
   2012   Landscapes, livelihoods, and environmental change in Southwest China I & II

American Geophysical Union (AGU) Fall Meeting

   2015   Conflict Ecology and the environment-conflict nexus
   2014   Conflict ecology: Exploring relationships between environmental change and armed conflict

SatSummit

   2017   Remote Sensing for Human Rights

Workshop

Nov 2019   *Machine Learning in ArcGIS Platform Workshop*. In partnership with ESRI. Oregon State University, Corvallis, Oregon

May 2018   Google Earth Engine (A hands-on introduction to Google Earth Engine; Intermediate Earth Engine; Advanced Earth Engine). In partnership with Google Earth Engine. Oregon State University, Corvallis, Oregon

PUBLIC PRESENTATIONS

Invited Panelist

2022   Looking through the keyhole: A critical view on (remote) environmental monitoring in environmental peacebuilding. *What Research and Experience Tells Us about Environmental Peacebuilding Monitoring and Evaluation* panel at the *Second International Conference on Environmental Peacebuilding*. (video)

2021   National Academies of Sciences, Engineering, and Medicine. *Accelerating the Analysis of Geographic Change: Analyzing human displacement and movement due to disruptions and shocks*. (link)

2020   Secure World Foundation and Space Enabled Group (MIT Media Lab), Serving Society with Space Data: Innovations in Satellite Applications for Humanitarian and Development Sectors in support of the SDGs. *Sustainable Development Goal 16: Peace, Justice and Strong Institutions* (video)

2019   Sharjah Architecture Triennial Rights of Future Generations Opening Programme. *Forum 4: Signal*. Sharjah, United Arab Emirates (video)

2015   Princeton University School of Architecture, Conflict Shorelines: History, Politics, and Climate Change. *Deserts*. Princeton, NJ

Invited Research Presentations

2022   1) *Satellite Remote Sensing over the Arc of Refugee Displacement.* "Impacts of Regional Conflicts on Land-Cover and Land-Use Change" webinar series organized by the NASA Land-Cover and Land-Use Change (LCLUC) Program (link)
       2) *Expanding the Humanitarian Horizon: Towards Integrative Analysis of Environmental and Climate Change in the World's Refugee Camps*. CIESIN, Columbia University

Jamon Van Den Hoek, PhD

2021 1) Charting Justice for Refugee Relocation Under Extreme Climate Change. At What Point Managed Retreat? Resilience, Relocation and Climate Justice. (**Van Den Hoek** & Peters)
2) A Social Justice Framing to Guide the Relocation of Refugees in a Warming World. Union of Concerned Scientists (Peters & **Van Den Hoek**)
3) A Social Justice Framing to Guide the Relocation of Refugees in a Warming World. Book Launch (Peters & **Van Den Hoek**)
4) Tracing the Limits of Remote Sensing with the help of Google Earth Engine. Google Earth Engine for Education Working Group (video)

2020 1) *Refugee Camps as Climate Traps?: Current and Future Climate Marginality at One Thousand Refugee Camps*. Arizona State University School of Politics and Global Studies (canceled due to pandemic)
2) *Refugee Camps as Climate Traps?: Current and Future Climate Marginality at One Thousand Refugee Camps*. Mississippi State University Department of Geosciences (canceled due to pandemic)
3) *Mapping the Missing Millions: Protraction, Marginality, and Invisibility*. Geography Department, University of Utah
4) Advancing Urban Conflict Damage Monitoring with Google Earth Engine Time Series Analysis. Google Geo for Good 2020 Public Sector Virtual Meetup (video)
5) The 22nd Century Survival Project. Oregon Museum of Science and Industry. (video)

2019 1) *Mapping the Missing Millions: Protraction, Marginality, and Invisibility*. NASA Applied Sciences, NASA Headquarters, Washington, DC
2) *Mapping the Missing Millions: Protraction, Marginality, and Invisibility*. World Bank, Washington, DC
3) *The Refugee Atlas*. National Geographic Headquarters, Washington, DC. (Zhao, **Van Den Hoek**, Svevo)
4) *Conflict, disaster, displacement, and climate change: An overview of recent research and case studies.* International Research Institute for Climate and Society (IRI), Earth Institute, Columbia University, Palisades, NY
5) *The creation of annual forest cover maps to assess forest transition in Nepal from 1990-2016*. 4th Open Science Meeting of the Global Land Programme, Bern, Switzerland (Hurni, **Van Den Hoek,** Smith)
6) *Development after Displacement: Using OSM data to measure SDG indicators at informal settlements*. State of the Map 2019 (Academic Track). Heidelberg, Germany (presented by Hannah Friedrich, link)
7) *At the boundaries of refugee and IDP settlement mapping using HOT data, machine learning with satellite imagery, and crowd-sourcing*. Humanitarian OpenStreetMap Summit. Heidelberg, Germany (Friedrich, Ballasiotes, Wrathall, **Van Den Hoek**)
8) *African Vegetation Loss Not Attributable to Refugees*. 12th Migration and Development Conference. Madrid, Spain (Maystadt, Mueller, **Van Den Hoek**, van Weezel)
9) *Mapping the Missing Millions.* The Effects of Migration on Settlements and Urbanisation in Ethiopia, Uganda, and Sudan. Addis Ababa, Ethiopia
10) *Mapping the Missing Millions.* The Rights of Future Generations. Columbia University GSAPP, Studio-X Amman. Wadi Rum, Jordan
11) *Refugee Camps as Climate Traps?: Mapping Current and Future Climate Marginality at One Thousand Refugee Camps with Google Earth Engine*. 2019 Google Geo for Good Summit. Sunnyvale, CA
12) *The Survival Project*. ESRI Headquarters. Redlands, CA

2018 1) *Annual Tree Cover Classification and Change Analysis across Nepal using Google Earth Engine (1988-2016)*. An International Meeting on Twenty-Five Years of Community Forestry in Nepal. Kathmandu, Nepal.
2) *Mapping the Missing Millions.* SatSummit, Washington, DC.
3) *Commercial Satellite Image Coverage over Conflict Regions.* SatSummit, Washington, DC.
4) *Mapping the Missing Millions*. Spatial AI, London, UK.
5) *The agrarian transition in Mainland Southeast Asia (MSEA): Changes in rice farming—1995 to 2018.* 2018 NASA LCLUC Spring Science Team Meeting. (Fox, **Van Den Hoek,** Hurni, Kontgis, Baird, Leisz, Rigg, Alonzo)
6) *The Refugee Archipelago: Assessing the enviro-climatic marginality of 922 refugee camps.* Weston Roundtable lecture, University of Wisconsin-Madison (video)
7) *Design and Systems Thinking for Global Development: Working Across Scales*. Keynote presentation for 2018 NSF Design Circle Workshop - Designing and Developing Global Engineering Systems. Corvallis, OR.

8) *War is a Land Use*. People-Environment Research Network (PERN) Cyberseminar, *People and Pixels Revisited: 20 years of progress and new tools for population-environment research* ([link](#))

2017   1) *The Refugee Archipelago*. Geospatial Sciences Center of Excellence, South Dakota State University ([video](#))

2) *The Refugee Archipelago: Measuring enviro-climatic marginality of 922 refugee camps using Earth Engine*. Google Earth Engine User Summit, Mountain View, CA. ([video](#))

3) *The Refugee Archipelago: A satellite image time series assessment of the enviro-climatic marginality of 922 global refugee camps.* Big Data and the Earth Sciences: Grand Challenges Workshop (Calit2's Pacific Research Platform and Scripps Institution of Oceanography's Center for Western Weather and Water Extremes (CW3E)). San Diego, CA.

4) *Targeted Killing and the Tyranny of Scale.* The Drone Revolution in Spatial Analysis (Harvard Center for Geographic Analysis annual conference). Cambridge, MA. ([video](#))

5) *Measuring long-term forest cover dynamics in Nepal with topography-corrected Landsat time series data.* NASA Land Cover/Land Use Change Program Spring webinar series ([video](#))

6) *By Any Lens Necessary: A Satellite Image Account of Conflict.* SonicActs Festival, Amsterdam, Netherlands. ([video](#))

7) *A satellite account of civil war: Aleppo in 258 images, 2006-2016.* SatSummit, Washington, DC.

8) *Conflict Ecology: Large Volume Geospatial Accounts of Violent Conflict.* OSU Research Computing Seminar. Corvallis, OR.

9) *On Geospatial Analysis and visualiZation for Education.* OSU Spatial Data Management Group. Corvallis, OR.

2015   1) *Conflict ecology: Remote monitoring of environmental conditions & consequences of armed conflict*. Columbia University Graduate School of Architecture, Planning and Preservation (GSAPP) Propositions 1: On Threat and Yaqeen. Amman, Jordan.

2) *Climate Syntax and the Refugee Archipelago.* Princeton University School of Architecture, Conflict Shorelines: History, Politics, And Climate Change. Princeton, NJ.

2014   1) *By any lens necessary: Examining environmental conditions of armed conflict using remote sensing.* Round Table 3: Image Actions at a Distance (Goldsmiths College Centre for Research Architecture)

2) *Using environmental satellite imagery to map regional conflict.* New York Times Graphics Department

2010   *Recent and historical deforestation in the sacred forests of Shangri-La.* Guilford College Religious Studies Department

Invited Professional Workshop Participation

2017   University of Colorado-Boulder Population Center. *Migration, Climate, and Health*. Boulder, CO

Contributed Research Presentations

2021   1) Expanding the Humanitarian Horizon: On the Application Readiness of Geospatial Data for Systematic, Anticipatory Analysis of Climate Change Impacts in the World's Refugee Camps. **Van Den Hoek**, Friedrich.

2) Temporal Dynamics of Refugee Camp Establishment and Tree Cover Change. Oromeng, Levin, Muller, **Van Den Hoek**, Ayeb-Karlsson, Ali, Davis. AGU Annual Meeting.

2020   1) Agricultural stability explains the location choices of internally displaced people (IDPs) during the Syrian Civil War. Wrathall, **Van Den Hoek**, Katz, Kilbride, Friedrich. AGU Annual Meeting.

2) Charting Justice for Refugee Relocation Under Extreme Climate Change. Peters, **Van Den Hoek.** AGU Annual Meeting.

2019   1) N*orthern Hemisphere atmospheric stilling amplifies lake thermal responses to warming*. Woolway, Merchant, **Van Den Hoek,** Azorin-Molina, Nõges, Laas, Mackay, Jones. EGU General Assembly.

2) *Monitoring forest disturbances after Colombian peace agreement: An ecological violence syndrome?* Murillo-Sandoval, Dexter, **Van Den Hoek,** Wrathall, Kennedy. AAG Annual Meeting.

3) *Identifying temporal and spatial patterns of refugee settlement establishment in Northern Uganda.* Friedrich, **Van Den Hoek.** AAG Annual Meeting.

4) *Breaking Ground: Automating the Detection of Refugee Settlement Establishment and Growth through Landsat and PlanetScope Time Series Analysis with a Case Study in Northern Uganda.* Friedrich, **Van Den Hoek**. AGU Annual Meeting.

5) *Earth observations to assess SDG 16: monitoring coastal and terrestrial signals of conflict in Gaza using satellite imagery.* Ballasiotes, **Van Den Hoek**. AGU Annual Meeting.

6) *The Geography of Exclusion: Assessing Refugee Settlement Presence across Global Remote Sensing-Derived Settlement Datasets.* **Van Den Hoek**, Ballasiotes, Friedrich. AGU Annual Meeting. ([link](#))

7) *Water dynamics of large controlled lakes in a global flood model: the case of Lake Victoria.* Getirana, Jung, **Van Den Hoek**. AGU Annual Meeting.

2018
1) *Refugee Camps as Climate Traps*. AGU Annual Meeting. ([link](#))
2) *Mapping the Missing Millions: A Global Analysis of Informal Settlements*. AGU Annual Meeting. ([link](#))
3) *A global assessment of the impact of armed conflict on forests using Google Earth Engine*. Murillo-Sandoval, Kennedy, **Van Den Hoek.** AAG Annual Meeting.

2017
1) *The Refugee Archipelago: A satellite image time series assessment of the enviro-climatic marginality of 922 global refugee camps.* AAG Annual Meeting.
2) *Clouds and coca: Mapping the socio-environmental effects of aerial fumigation in southern Colombia through coupled field- and remote sensing-based inquiry*. Meszaros-Martin, **Van Den Hoek,** Alonzo. AAG Annual Meeting.
3) *Cloud-resilient Remote Sensing Time Series Analysis of Land Cover Change in Tropical, Socio-environmental Systems*. Alonzo, **Van Den Hoek**, Levan. AAG Annual Meeting.

2016
1) *Constraints of Remote Monitoring of Violent Conflict: Acute and Protracted Land Cover Change in Nigeria under Boko Haram*. AAG Annual Meeting.
2) *Freedom of the Press in the Era of Climate Change: From Propaganda to Discourse, Vulnerability to Resilience*. Peters, **Van Den Hoek.** AAG Annual Meeting.

2015
1) *Drone conflict ecology: On the interrelationships between agricultural land cover/land use & armed conflict in northwest Pakistan*. AAG Annual Meeting.
2) *Conflict is a land use: Remote monitoring of environmental conditions and consequences of armed conflict*. Dimensions of Political Ecology (DOPE) Conference.

2014
1) *Conflict ecology: Examining interrelationships between agricultural land use/land cover and drone strike incidence in northwest Pakistan*. AGU Annual Meeting.
2) *Mapping changes in agricultural cropping frequency across Zimbabwe using cross-scale time-series remote sensing data and a novel signal decomposition method*. Khandelwal, **Van Den Hoek,** Sedano, Kumar, Tucker. AGU Annual Meeting. (poster)
3) *Prospects and challenges in integrating reservoir operation in a global surface water dynamic modeling framework*. Getirana, **Van Den Hoek,** Sulistioadi, Peters-Lidard. AGU Annual Meeting. (poster)
4) *Warfare ecology: On the relationship between agricultural productivity and incidence of armed conflict in northwest Pakistan*. Frontiers in Earth Observation for Land System Science, EARSeL & NASA Workshop. (poster)

2013
1) *Examining the Carbon Sequestration Potential of Regenerating Forests Using Pulse-Density Normalized High-Resolution Repeat LiDAR and Landsat Disturbance Data*. AGU Annual Meeting.
2) *Upscaling aquatic ecology: Pairing modern analytics with Big Data to simulate 2,500 lakes*. Read, Winslow, Hansen, **Van Den Hoek,** Markfort, Hansen, Booth. AGU Annual Meeting.
3) *Upscaling Aquatic Ecology: Linking Continental Data Products to Distributed Lake Models.* Read, Winslow, Hansen, **Van Den Hoek,** Markfort, Hansen, Booth. EarthCube Inland Waters Communities Workshop. (poster)
4) *Examining the Carbon Sequestration Potential of Recently Disturbed Trees in a Managed Northern Wisconsin Forest*. North American Carbon Program (NACP). (poster)

2012
Mosaics of Change: Cross-Scale Forest Cover Dynamics in Diqing Prefecture, Yunnan, PRC. AAG Annual Meeting.

2011
1) *The Role of Local Institutions on Recent Forest Dynamics in Mountainous Southwest China*. AAG Annual Meeting.

2) *Local Drivers of Forest Cover Change Variability in Tibetan Yunnan, China*. Association for Nepal and Himalayan Studies (ANHS) Conference.

2008   *Assessing the Role of Ethnic Variability in Regional Land-use/Land-cover Change with a Case Study in Northwest Yunnan Province, China*. AAG Annual Meeting.

2007   1) *Exploring the Relationship between Navigational Tools and Geographic Context in Interactive and Static Maps*. **Van Den Hoek,** Woodruff, McGlynn. AAG Annual Meeting.

2) An Interdisciplinary Approach to Biological Conservation and Sustainable Development in Southwest China. **Van Den Hoek,** Baumgartner, Behm, Hildebrandt, Lawrence, Robinson. Eco-Summit. (poster)

SERVICE

Program Service

2019-present	Leader of Geography Graduate Admissions Committee
2017-present	Co-leader of Geospatial Science Curriculum Task Force
2021	Geospatial Science Instructor Position Search Committee Member
2018-2021	Critical Cartography Faculty Position Search Committee Member
2018-2019	Geography Graduate Admissions Committee Member
2017	Presented Geography and Geospatial Science undergraduate degree to Oregon State University Board of Trustees

College Service

2018-2019	CEOAS Promotion Review and Tenure Committee Member
2018-2019	CEOAS Associate Dean of Academic Programs Search Committee Member
2017-2018	CEOAS Strategic Planning Committee Member

University and Institutional Service

2018-2019	Organized multiple workshops and seminars for Oregon State University (see above)
2016	Member of OregonView consortium based at Oregon State University
2015	Committee member for NASA Goddard Space Flight Center Young Scientist Forum
2014-2015	Co-coordinator of NASA Biospheric Sciences Laboratory bi-weekly seminar series
2010	Geography Department Graduate Program Steward for UW-Madison Teaching Assistant Association

Professional Service

2022	Review Panel Member: NASA ROSES 2021, NASA Land-Cover/Land-Use Change Program South/Southeast Asia Research Initiative (SARI) Synthesis

Membership/Authorship

2021-present	Working Group Member: Earth Observation for Anticipatory Action, Anticipation Hub
2021-present	Technical Advisory Group Member: World Bank, the African Union Commission and the United Nations project, "Shaping the Future of Mobility in Africa: Addressing Climate-Forced Displacement & Migration in the Continent"
2021	Contributing Author: Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) Working Group 2 (WG2) Chapter 8 "Poverty, Livelihoods and Sustainable Development"

Academic Journal Editing

2021	Guest Editor, *Remote Sensing* special issue: "Remote Sensing of Geopolitics" https://www.mdpi.com/journal/remotesensing/special_issues/geopolitics

Academic Journal Reviewing

Applied Geography - Conservation Ecology – Ecology and Society – Ecosystems –Environmental Research Letters – International Journal of Disaster Risk Reduction –International Journal of Geographical Information

Jamon Van Den Hoek, PhD

Science – ISPRS International Journal of Geo-Information – Journal of Borderlands Studies – Mountain Research and Development – Nature Communications – Population and Environment – Regional Environmental Change – Remote Sensing – Remote Sensing Applications: Society and Environment – Remote Sensing of Environment – Science – World Development

DIVERSITY, EQUITY, AND INCLUSION

Leadership

2020   Led development and implementation of holistic admissions review process for OSU Geography graduate program

Training and Development

2019   Oregon State University Holistic Graduate Admissions Workshop participant: Two-hour workshop on revising graduate program admissions review and criteria to be more inclusive for a diverse student body
2018   Social Justice Education Initiative workshop participant
2016   National Center for Faculty Development and Diversity Faculty Success Program participant
2016   Oregon State University ADVANCE program participant: NSF-funded 60hr seminar focused on increasing the participation and advancement of women in academic science and engineering careers

MEDIA ATTENTION AND COMMUNICATION

Media Attention

Jan 2020   *Nature*: "After Colombia's civil war ended, so did 'gunpoint conservation'" ([link](#))
Sept 2019   *Nepali Times*: "Tree-mendous: Community management and outmigration have helped Nepal double its forest area in 25 years" ([link](#))
Aug 2019   *Yale e360*: "In Nepal, Out-Migration Is Helping Fuel a Forest Resurgence" ([link](#))
Aug 2019   Flash Forward: *CRIME: I Can See My House From Here!*, about the ethical implications and practical limitations of remote sensing for surveillance and mapping of vulnerable populations ([link](#))
Apr 2019   *The Atlantic* on "What Spy-Satellite Companies Can Teach NASA About Climate Change" ([link](#))
Aug 2016   *The Atlantic* on poverty mapping with satellite data ([link](#))
Dec 2018   *OSU Today* ([link](#))
Jan 2018   *Terra* on mapping informal settlements ([link](#))
Dec 2016   *Terra* on using geovisualization for teaching ([link](#))
Dec 2014   *AGU EOS* ([link](#), [link pg. 7](#))
Oct 2014   Wisconsin Institutes for Discovery on "conflict ecology" research ([link](#))
Sept 2014   American Geophysical Union representative for Geoscience Congressional Visits Day (Geo-CVD); met with Committee on Space, Science & Technology representatives to discuss importance of satellite data continuity
May 2012   Interviewed by WORT Radio in Madison, WI, on using satellite imagery to study archaeological landscapes

Media Communication

2016   Compass Training participant: Eight-hour training on scientific communication to media and policymakers

OTHER RESEARCH EXPERIENCE & SKILLS

Field Experience

2019   Ethiopia: Expert interviews on forced displacement and informal settlement establishment. Addis Ababa. (1 week)
2017   Nepal: Social ground truth data collection for satellite time series disturbance analysis. Dolakha, Gorka, Kathmandu. (4 weeks)
2013   USA: Forest field inventory for aerial lidar survey validation, Chequamegon-Nicolet National Forest, Wisconsin. (2 weeks)

2007-2012 China: Himalayan agro-pastoral and nomadic land use systems, Yunnan and Sichuan Provinces. (Ph.D. research; 2 years)

2010 Nepal: Tibetan Buddhist sacred spaces, Kathmandu Valley. (2 weeks)

2004-2005 Turkey: 4th c. BCE Archaeological burial mound survey, Granicus. (10 weeks)

2002 Turkey: 1st c. CE Roman aqueduct survey, Troy, (M.Sc. research; 5 weeks)

2002 Ukraine: 5th c. BCE Greek farmhouse survey, Chersonesos. (5 weeks)

Professional Affiliations

- American Association of Geographers (AAG)
- American Geophysical Union (AGU)

Software Development & Programming

- Expert in geospatial and statistical programming using Python, R, Javascript, bash, IDL, and SQL
- Expert in satellite image analysis, processing, modeling, and machine learning using Google Earth Engine, Python, QGIS, ArcGIS, and ENVI
- Expert in digital cartography using Python, Adobe Creative Suite, and various GIS platforms
- Knowledgeable with theoretical and computational aspects of statistical machine learning, algorithm design, and optimization
- Competent using cloud-based computing, high performance computing (HPC), and Python multiprocessing and for numeric analysis on a parallel supercomputer
- Experienced with geophysical prospection techniques including fluxgate magnetometry, ground-penetrating radar, and electrical resistivity

Languages

English: Native speaker   French: Elementary proficiency   Chinese (Mandarin): Elementary proficiency