

**Meha Jain**  
School for Environment and Sustainability  
University of Michigan  
3540 Dana Building, 440 Church Street, Ann Arbor, MI 48109  
[mehajain@umich.edu](mailto:mehajain@umich.edu); <https://www.mehajain.weebly.com>

### **APPOINTMENTS AND EDUCATION**

- **University of Michigan, Assistant Professor** 2016 - present  
School for Environment and Sustainability
- **Stanford University, Postdoctoral Fellow** 2014 - 2016  
Department of Earth System Science  
Advisor: David Lobell
- **Columbia University, Ph.D.** 2008 - 2014  
Department of Ecology, Evolution, and Environmental Biology  
Environmental Policy Certificate  
Advisors: Ruth DeFries and Shahid Naeem
- **Princeton University, A.B.** 2003 - 2007  
Department of Ecology and Evolutionary Biology  
Environmental Studies Certificate  
Advisor: Daniel Rubenstein

### **HONORS AND FELLOWSHIPS**

- NASA Early Career Award (New Investigator Program)
- National Science Foundation Postdoctoral Fellow
- National Science Foundation Graduate Research Fellow
- National Geographic Young Explorer
- Compton Foundation Scholar
- Departmental Honors (*cum laude*), Princeton University

### **PUBLICATIONS**

Advisees are underlined

Citations: 2880, h-index: 25; i10 index: 34 (Google Scholar, 4-1-22)

Maternity leave: December 2019 to March 2020. Nurturing leave: September to December 2020.

#### **Submitted, In Review, or In Revision**

1. Paliwal, A., B. Singh, **M. Jain** (Submitted). Using micro-satellite data to map the magnitude, persistence, and drivers of field-level yield gaps in smallholder systems.
2. Mei, W., D. Fouhey, H. Wang, P. Rao, W. Zhou, I. Hinks, J. Gray, D. Van Berkel, **M. Jain** (In Review). Using deep learning and very-high-resolution imagery to map smallholder field boundaries.
3. Liu, Y., P. Rao, W. Zhou, A.K. Srivastava, S. Poonia, B. Singh, D. Van Berkel, **M. Jain** (In Review). Using Sentinel-1, Sentinel-2, and Planet Satellite data to map field-level tillage practices in smallholder systems.

4. Liu, T., L.J. Mickley, P.N. Patel, R. Gautam, **M. Jain**, S. Singh, B. Singh, R.S. DeFries, M.E. Marlier (In Review). Cascading delays in the monsoon rice growing season and post-monsoon fires likely exacerbate poor air quality in north India.
5. Fishman, R., **M. Jain**, A. Kishore (In Review). When water runs out: Adaptation to gradual environmental change in Indian agriculture.
6. Mehrabi, Z., et al (**M. Jain** one of fifty authors) (In Revision). Research priorities for extreme events and global food security.
7. Sullivan, J., D.G. Brown, F. Moyo, **M. Jain**, A. Agrawal (In Revision). Impacts of large-scale land acquisitions on smallholder agriculture and livelihoods in Tanzania.

## 2022

1. Deshpande, M., D. Pillai, **M. Jain** (2022). Detecting and quantifying residue burning in smallholder systems: An integrated approach using Sentinel-2 data. *International Journal of Applied Earth Observations and Geoinformation*. 108: 102761. **IF: 5.9**
2. Krishna, V., A. Keil, **M. Jain**, W. Zhou, M. Jose, S. Surendran-Padmaja, L. Barba-Escoto, B. Singh, M.L. Jat, O. Erenstein (2022). Conservation agriculture benefits farmers, but technology targeting needed for greater impacts. *Frontiers in Agronomy*. 4:772732.
3. Ishtiaque, A., S. Singh, D.B. Lobell, B. Singh, R. Fishman, **M. Jain** (2022). Prior crop season management constrains farmer adaptation to warming temperatures: Evidence from the Indo-Gangetic Plains. *Science of the Total Environment*. 807(2): 151671. **IF: 8.0**

## 2021

4. Zhou, W., P. Rao, M.L. Jat, B. Singh, R. Singh, U. Schulthess, S. Poonia, D. Bijarniya, L.K. Singh, M. Kumar, **M. Jain** (2021). Using Sentinel-2 to track field-level tillage practices at regional scales in smallholder systems. *Remote Sensing*. 13(24): 5108. **IF: 4.8**
5. Bhattacharai, N., A. Pollack, D.B. Lobell, R. Fishman, B. Singh, A. Dar, **M. Jain** (2021). The impact of groundwater depletion on agricultural production in India. *Environmental Research Letters*. 16: 085003. **IF: 6.8**
6. Rao, P., W. Zhou, N. Bhattacharai, A.K. Srivastava, B. Singh, S. Poonia, D.B. Lobell, **M. Jain** (2021). Using Sentinel-1, Sentinel-2, and Planet imagery to map crop type of smallholder farms. *Remote Sensing*. 13(10): 870. **IF: 4.8**
7. **Jain, M.**, R. Fishman, P. Mondal, G.L. Galford, N. Bhattacharai, S. Naeem, U. Lall, B. Singh, R.S. DeFries (2021). Groundwater depletion will reduce cropping intensity in India. *Science Advances*. 7 (9): eabd2849. **IF: 14.14**

\* Press: CNN, NPR, The Hindu, AAAS, Michigan News, Earther, SciDev, TPCI

## 2020 (Maternity Leave)

8. Liu, T., L.J. Mickley, S. Singh, **M. Jain**, R.S. DeFries, M.E. Marlier (2020). Crop residue burning practices across north India inferred from household survey data: Bridging gaps in satellite observations. *Atmospheric Environment*. X8: 100091. **IF: 4.8**

9. Ricciardi, V., A. Wane, B.S. Sidhu, C. Goode, D. Solomon, E. McCullough, F. Diekmann, J. Porciello, **M. Jain**, N. Randall, Z. Mehrabi (2020). A scoping review of research funding for small-scale farmers in water scarce regions. *Nature Sustainability*. 3: 836-844. **IF: 19.3**
10. Newport, D., D.B. Lobell, B. Singh, A.K. Srivastava, P. Rao, M. Umashaanker, R.K. Malik, A. McDonald, **M. Jain** (2020). Factors constraining timely sowing of wheat as an adaptation to climate change in eastern India. *Weather, Climate, and Society*. 12(3): 515-528. **IF: 2.7**
11. Tellman, E., S. Sesnie, N. Magliocca, E. Nielsen, J. Devine, K. McSweeney, **M. Jain**, D. Wrathall, K. Benessaiah, B. Gonzalez (2020). Illicit drivers of land use change: Narcotrafficking and forest loss in Central America. *Global Environmental Change*. 63: 102092. **IF: 9.5**
12. **Jain, M.**, D. Solomon, H. Capnerhurst, A. Arnold, A. Elliott, A. Kinzer, C. Knauss, M. Peters, B. Rolf, A. Weil, C. Weinstein (2020). How much can sustainable intensification increase yields across South Asia? A systematic review of the evidence. *Environmental Research Letters*. 15: 083004. **IF: 6.8**
13. Kubitzka, C., V. Krishna, U. Schultess, **M. Jain** (2020). Estimating adoption and impacts of agricultural management practices in developing countries using satellite data: A scoping review. *Agronomy for Sustainable Development*. 40:16. **IF: 5.8**
14. Singh, S., A.D. Jones, **M. Jain** (2020). Regional differences in agricultural and socioeconomic factors associated with farmer household dietary diversity in India. *PLoS ONE*. 15(4): e0231107. **IF: 3.2**
15. Elmes, A., H. Alemohammad, R. Avery, K. Caylor, R. Eastman, L. Fishgold, M. Friedl, **M. Jain**, D. Kohli, J.C. Laso Bayas, D. Lunga, J. McCarty, R.G. Pontius Jr., A.B. Reinmann, J. Rogan, L. Song, H. Stoyanova, S. Ye, Z. Yi, L. Estes (2020). Accounting for training error in machine learning applied to Earth observations. *Remote Sensing*. 12 (6). **IF: 4.8**
16. Paliwal, A., **M. Jain** (2020). The accuracy of self-reported crop yield estimates and their ability to train remote sensing algorithms. *Frontiers in Sustainable Food Systems*. 4 (25). **IF: 4.0**
17. **Jain, M.** (2020). The benefits and pitfalls of using satellite data for causal inference. *Review of Environmental Economics and Policy*. 14(1). 157-169. **IF: 6.0**
18. Singh, S., A.D. Jones, R.S. DeFries, **M. Jain** (2020). The association between crop and income diversity and farmer intra-household dietary diversity in India. *Food Security*. **IF: 3.3**

## 2019

19. **Jain, M.**, B. Singh, P. Rao, A.K. Srivastava, S. Poonia, J. Blesh, G. Azzari, A.J. McDonald, D.B. Lobell (2019). The impacts of agricultural interventions can be doubled by using satellite data. *Nature Sustainability*. 2, 931-934. **IF: 19.3**. \* Press: Nature Sustainability News & Views, Michigan News, Outlook India, India TV News, Smithsonian Magazine

20. Bhattacharai, N., K. Mallick, J. Stuart, B.D. Vishwakarma, R. Niraula, S. Sen, **M. Jain** (2019). An automated multi-model evapotranspiration mapping framework using remotely sensed and reanalysis data. *Remote Sensing of Environment*. 229: 69-92. **IF: 10.2**
21. Liu, T., M.E. Marlier, A.N. Karambelas, **M. Jain**, S. Singh, M.K. Singh, R. Gautam, and R.S. DeFries (2019). Missing emissions from post-monsoon agricultural fires in northwestern India: regional limitations of MODIS burned area and active fire products. *Environmental Research Communications*. 1:1. **IF: 2.1**
22. Ramirez-Reyes, C., K.A. Brauman, R. Chaplin-Kramer, G.L. Galford, S. Adamo, C.B. Anderson, C. Anderson, G.R.H. Allington, K.J. Bagstad, M.T. Coe, A.F. Cord, L.E. Dee, R.K. Gould, **M. Jain**, V.A. Kowal, F. Muller-Karger, J. Norriss, P. Potapov, J. Qiu, J.T. Rieb, B.E. Robinson, L.H. Samberg, N. Singh, S.H. Szeto, B. Voight, M. Wright, K. Watson (2019). Reimagining the potential of Earth observations for ecosystem service assessments. *Science of the Total Environment*. 665: 1053-1063. **IF: 8.0**

## 2018

23. Vandermeer, J., A. Aga, J.E. Allgeier, C. Badgley, R. Baucom, J. Blesh, L. Fink Shapiro, L. Hoey, **M. Jain**, A.D. Jones, I. Perfecto, M.L. Wilson (2018). Feeding Prometheus: An interdisciplinary approach for solving the global food crisis. *Frontiers in Sustainable Food Systems*. 2(39). **IF: 4.0**
24. Urban, D., K. Guan, **M. Jain** (2018). Estimating sowing dates from satellite data over the U.S. Midwest: A comparison of multiple sensors and metrics. *Remote Sensing of Environment*. 211: 400-412. **IF: 10.2**
25. Bhattacharai, N., K. Mallick, N. Brunsell, G. Sun, **M. Jain** (2018). Regional evapotranspiration from an image-based implementation of the Surface Temperature Initiated Closure (STIC1.2) model and its validation across an aridity gradient in the conterminous US. *Hydrology and Earth System Sciences*. 22: 2311-2341. **IF: 5.7**  
 \*Selected as a 'Highlight Article' by the Editorial Board of HESS

## 2017

26. Azzari, G., **M. Jain**, D.B. Lobell (2017). Towards fine resolution global maps of crop yields: Testing multiple methods and satellites in three countries. *Remote Sensing of Environment*. 202: 129-141. **IF: 10.2**
27. **Jain, M.**, B. Singh, A. Srivastava, R.K. Malik, A. McDonald, D.B. Lobell (2017). Using satellite data to identify the causes of and potential solutions for yield gaps in India's wheat belt. *Environmental Research Letters*. 12: 094011. **IF: 6.8** \*Selected as a 'Featured Article' by the Editorial Board of ERL. Press: Scidev.net, University Record, Phys.org, Michigan News, Environmental Research Web
28. Kramer, D.B., J. Hartter, A.E. Boag, **M. Jain**, K.J. Stevens, K.A. Nicholas, W. McConnell, J. Liu (2017). Top 40 questions in coupled human and natural systems (CHANS) research. *Ecology and Society*. 22(2): 4. **IF: 4.4**
29. **Jain, M.**, P. Mondal, G.L. Galford, G. Fiske, R.S. DeFries (2017). An automated approach to map winter cropped area of smallholder farms across large scales using MODIS imagery. *Remote Sensing*. 9:566 **IF: 4.8**

## 2016

30. **Jain, M.**, A. Srivastava, B. Singh, A. McDonald, K. Royal, M.C. Lisaius, D.B. Lobell (2016). Mapping smallholder wheat yields and sowing dates using microsatellite data. *Remote Sensing*. 8(10): 860. **IF: 4.8**
31. Mondal, P., **M. Jain**, M. Zukowski, G. Galford, R.S. DeFries (2016). Quantifying fluctuations in the winter productive cropped area in the Central Indian Highlands. *Regional Environmental Change*. 16: 69-82. **IF: 2.7**

## 2015

32. Feola, G., A.M. Lerner, **M. Jain**, M.J.F. Montefrio, K.A. Nicholas (2015). Researching farmer behavior in climate change adaptation and sustainable agriculture: Lessons learned from five case studies. *Journal of Rural Studies*. 35: 74-84. **IF: 4.9**
33. **Jain, M.**, S. Naeem, B. Orlove, V. Modi, R.S. DeFries (2015). Understanding the causes and consequences of differential decision-making in adaptation research: Adapting to a delayed monsoon onset in Gujarat, India. *Global Environmental Change*. 31: 98-109. **IF: 9.5** \*Selected as one of the top papers in GEC that has advanced the frontiers of adaptation research over the past 10 years
34. Mondal, P., **M. Jain**, R.S. DeFries, G.L. Galford, C. Small (2015). Sensitivity of crop cover to climate variability: Insights from two Indian agro-ecoregions. *Journal of Environmental Management*. 148: 21-30. **IF: 6.8**

## 2014

35. Mondal, P., **M. Jain**, A.W. Robertson, G.L. Galford, C. Small, R.S. DeFries (2014). Winter crop sensitivity to inter-annual climate variability in central India. *Climatic Change*. 126: 61-76. **IF: 4.7**
36. Wood, S., A. Jina, **M. Jain**, P. Kristjanson, R.S. DeFries (2014). Smallholder farmer cropping decisions related to climate variability across multiple regions. *Global Environmental Change*. 25: 163-172. **IF: 9.5** \*Selected as one of the top papers in GEC that has advanced the frontiers of adaptation research over the past 10 years
37. **Jain, M.**, Y. Lim, J.A. Arce-Nazario, M. Uriarte (2014). Perceptual and socio-demographic factors associated with household drinking water management strategies in rural Puerto Rico. *PLoS ONE*. 9(2): 1-8. **IF: 3.2**
38. **Jain, M.**, D.F.B. Flynn, C.M. Prager, G.M. Hart, C.M. DeVan, F.S. Ahrestani, M.I. Palmer, D.E. Bunker, J.M.H. Knops, C.F. Jouseau, and S. Naeem (2014). The importance of rare species: A trait-based assessment of rare species contributions to functional diversity and possible ecosystem function in tall-grass prairies. *Ecology and Evolution*. 4(1): 104-112. **IF: 2.9**

## 2013 and earlier

39. **Jain, M.**, P. Mondal, R.S. DeFries, C. Small, G.L. Galford (2013). Mapping cropping intensity of smallholder farms: A comparison of methods using multiple sensors. *Remote Sensing of Environment*. 134: 210-223. **IF: 10.2**
40. Balvanera, P., M. Uriarte, L. Almeida-Lenero, A. Altesor, F. DeClerck, T. Gardner, J. Hall, A. Lara, P. Laterra, M. Pena-Claros, D.M.S. Matos, L.P. Romero-Duque, A.L.

Vogl, L.F. Arreola, A.P. Caro-Borrero, F. Gallego, **M. Jain**, C. Little, R. de Oliveira Xavier, J.M. Paruelo, J.E. Peinado, L. Poorter, N. Ascarrunz, F. Correa, M.B. Cunha-Santino, A.P. Hernandez-Sanchez, M. Vallejos (2012). Ecosystem services research in Latin America: The state of the art. *Ecosystem Services*. 2: 56-70. **IF: 5.5**

41. Yackulic, C.B., M. Fagan, **M. Jain**, A. Jina, Y. Lim, M. Marlier, R. Muscarella, P. Adame, R.S. DeFries, M. Uriarte (2011). Biophysical and socioeconomic factors associated with forest transitions at multiple spatial and temporal scales. *Ecology and Society*. 16(3): 15. **IF: 4.4**
42. Odadi, W., **M. Jain**, S. Van Wieren, H.T. Prins, D.I. Rubenstein (2011). Facilitation between bovids and equids on an African savanna. *Evolutionary Ecology Research*. 13:237-252. **IF: 1.05**
43. Flynn, DFP., N. Mirotnick, **M. Jain**, M.I. Palmer, S. Naeem (2011). Functional and phylogenetic diversity as predictors of biodiversity-ecosystem-function relationships. *Ecology*. 92(8): 1573-1581.1 **IF: 5.5**
44. Forbes, T., V. Goss, **M. Jain**, P.C. Burns (2007). Structure determination and infrared spectroscopy of K(UO<sub>2</sub>)(SO<sub>4</sub>)(OH)(H<sub>2</sub>O) and K(UO<sub>2</sub>)(SO<sub>4</sub>)(OH). *Inorganic Chemistry*. 26(18):7163-7168 **IF: 5.2**

#### **Book Chapters, Reviews, and Data Products**

1. **Jain, M.**, W. Zhou, A. Paliwal (2022). Mapping smallholder yields using Planet and Sentinel-2 satellite data. In *Remote Sensing of Agriculture and Land Cover/Land Use Changes in South and Southeast Asian Countries*, edited by K. Vadrevu, T. Le Toan, S. Ray, and C. Justice. Springer Press.
2. **Jain, M.**, Singh B (2019). Toward an evergreen revolution: Sustainable intensification in smallholder farming. In *A Better Planet*, edited by D. Esty and I. Burke. Yale University Press.
3. **Jain, M.** (2019). Book review of ‘The fate of food: What we’ll eat in a bigger, hotter, smarter world’ in The scientist’s summer reading list. *Science*. 364 (6444).
4. **Jain, M.**, P. Mondal, G. L. Galford, G. Fiske, and R. S. DeFries (2017). India annual winter cropped area, 2001-2016. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). <https://doi.org/10.7927/H47D2S3W>.

#### **RESEARCH FUNDING**

Advisees are underlined

**University of Michigan Total: \$3,275,860**

#### **Current**

1. **USDA** (\$262,500). National Needs Graduate and Postgraduate Fellowship Grants Program Funding Opportunity (NNF). February 2021 to 2026.  
**PI:** I. Perfecto. **Co-PIs:** J. Blesh, **M. Jain**, B. O’Neill.
2. **NASA** (\$448,693). Land-Cover and Land-Use Change (LCLUC) Program. January 2021 to 2024.  
**PI:** **M. Jain**. Collaborators: V. Krishna, A. Lerner. Postdoc: N. Bhattarai.

3. **CGIAR** (\$270,563). Standing Panel on Impact Evaluation. January 2021 to 2023.  
PI: V. Krishnan. **Co-PIs: M. Jain**, M.L. Jat, D. Pillai.
4. **NASA** (\$183,278). Commercial SmallSat Data Analysis. August 2021 to January 2023  
**PI: M. Jain**. Collaborator: J. Chamberlin. Postdoc: A. Paliwal.
5. **NASA** (\$725,457). Land-Cover and Land-Use Change (LCLUC) Program. January 2020 to 2023.  
PI: J. Gray. **Co-PIs: M. Jain**, A. Agrawal. Collaborator: B. Singh.
6. **USDA** (\$500,000). Agriculture and Food Research Initiative. August 2019 to 2022.  
PI: K. Adkins. **Co-PIs: I. Perfecto, M. Jain**, J. Vandermeer
7. **USDA** (\$500,000). Agriculture and Food Research Initiative. May 2019 to 2022.  
PI: J. Blesh. **Co-PIs: M. Jain**, A. Reimer, J. Doll

### **Completed**

8. **NASA** (\$751,707). Land-Cover and Land-Use Change (LCLUC) Program. March 2017 to 2021.  
**PI: M. Jain**. Co-PIs: D. Lobell, R. Fishman. Collaborators: A. Chhatre, B. Singh.
9. **University of Michigan MCubed Award** (\$60,000). September 2019 to 2020.  
**PI: M. Jain**. Co-PIs: B. Butt, B. Min.
10. **NASA** (\$262,612). New Investigator Program in Earth Science Grant. September 2016 to 2020.  
**PI: M. Jain**. Collaborators: D. Lobell, R. Fishman, A. Chhatre, B. Singh.
11. **NSF** (\$487,020). Sustainability Postdoctoral Fellowship. August 2014 to 2018.  
**PI: M. Jain**. Mentors: D. Lobell, R. Fishman.
12. **Google Earth Engine Research Award** (\$62,867). June 2014 to 2015.  
PIs: G. Galford, R.S. DeFries. **Co-PIs: M. Jain**, G. Fiske, P. Mondal
13. **NSF** (\$14,488). Doctoral Dissertation Improvement Grant. Spring 2013 to 2015.
14. **NASA** (\$751,000). Land Cover and Land Use Change Grant. May 2011 to 2014.  
PIs: R.S. DeFries, C. Small, G. Galford. Collaborators: M. Lal, **M. Jain**
15. **NSF** (\$1000). Coupled Human and Natural Systems Fellow. Fall 2013.
16. **NSF** (\$150,000). Graduate Research Fellowship. Fall 2009 to 2012.
17. **National Geographic** (\$5,000). Young Explorers Grant. Fall 2011.
18. **Compton Foundation** (\$36,000) Fellowship. September 2007 to 2008.

### **TEACHING**

1. Natural Resource Statistics (EAS 538) – Core graduate-level introductory statistics and R programming class. *Nominated for the ‘Outstanding Teacher’ award* (2017-19). 42 students (Winter 2017), 81 students (Winter 2018), 80 students (Winter 2019), 94 students (Fall 2019), 90 students (Winter 2022).
2. Methods/Skills in Sustainability and Development (Coursera MasterTrack class) – Six-week online course giving an overview of methods and skills for those within the field of

Sustainability and Development. Co-taught with Arun Agrawal. 331 online learners to date (created Winter 2021).

3. Pathways to Zero Hunger (Coursera MasterTrack class) – Six-week online course giving an overview of global agricultural production, causes of food insecurity, and potential solutions for meeting Sustainable Development Goal 2, Zero Hunger. 349 online learners to date (created Fall 2020).
4. Global Environmental Change and Sustainable Food Systems (EAS 639) – Graduate course on the impacts of global environmental change on food systems and potential sustainable intensification strategies. 10 students (Winter 2018), 8 students (Winter 2019).
5. Introduction to R (EAS 501) – Graduate workshop that introduces students to R project software. 60 students (Winter 2019).
6. Growing into an Uncertain Future (Michigan Sustainability Case) – Online learning module on how farmers are adapting wheat systems to climate change in India (created Winter 2018).

### **STUDENTS AND RESEARCHERS SUPERVISED**

#### Postdoctoral Fellows:

1. Ambica Paliwal (2019 – present)
2. Asif Ishtiaque (2019 – 2022) – Assistant Professor, Department of Geography, Geology, and Planning, Missouri State University
3. Gopal Penny (2021) – Assistant Professor, Department of Geography, National University of Singapore (NUS)
4. Mehedy Hassan (2021) – Research Scientist, University of Florida
5. Nishan Bhattarai (2016-2020) – Assistant Professor, Department of Geography, University of Oklahoma
6. Preeti Rao (2018-2020) – Project Scientist, Satelitytics
7. Sanjit Maiti (2019) – Scientist at the Indian Council of Agricultural Research-National Dairy Research Institute
8. Sukhwinder Singh (2016-2019) – Senior Research Associate at the Public Health Foundation of India

#### PhD Students:

##### *Chair*

1. Divya Solomon (2017 – present), advanced to candidacy and will graduate in Winter 2023 (5 years)

##### *Committee Member*

2. Etienne Herrick, SEAS, University of Michigan (Chair: Jennifer Blesh)
3. Sasha Bishop, EEB, University of Michigan (Chair: Regina Baucom)
4. Sitian Xiong, Geography, Clark University (Chair: Lyndon Estes)



5. Nabin Pradhan, SEAS, University of Michigan (Chair: Arun Agrawal)
6. David Grace, SEAS, University of Michigan (Chair: David Van Berkel)
7. Sanaz Chamanara (Defended 2022), SEAS, University of Michigan (Chair: Joshua Newell) – Postdoctoral Researcher, UC Santa Barbara
8. Jonathan Sullivan (Defended 2021), SEAS, University of Michigan (Chairs: Dan Brown and Arun Agrawal) – Postdoctoral Researcher, University of Arizona
9. Alexander Killion (Defended 2021), SEAS, University of Michigan (Chair: Neil Carter) – Postdoctoral Researcher, Yale University
10. Elizabeth Tellman (Defended 2019), School of Sustainability, Arizona State University (Chairs: Billie Turner and Hallie Eakin) – Assistant Professor, University of Arizona

### M.Sc. Thesis Students

#### Chair

1. Zachary Mondschein (2021 – present).
2. Yin Liu (Defended 2021) - PhD Student, University of Illinois Urbana-Champaign
3. Weiye Mei (Defended 2021) - PhD Student, University of Illinois Urbana-Champaign
4. Yiwen Shao (Defended 2021) - PhD Student, Michigan State University
5. Haoyu Wang (Defended 2020) - PhD Student, University of Texas at Austin
6. Harrison Smith (Defended 2019) - PhD Student, University of Arkansas
7. Maanya Umashaanker (Defended 2019) - GIS Engineer, Amazon Locker
8. Xuewei Wang (Defended 2019) - Data Scientist at Data-Driven EnviroLab
9. Weiqi Zhou (Defended 2019) - Research Intern at World Resources Institute

### Undergraduate Students

1. Siqi Ma (Undergraduate Research Opportunity Program, UROP)
2. Alliyiah Torrey (UROP)
3. Grace Park
4. Renee Jia-Er Siew (UROP)
5. Toyosi Dickson (Doris Duke Conservation Scholar)
6. Laurie Gronewold (UROP)
7. Shon Harris (UROP Community College Scholars, CCS)
8. Halie Kish (UROP CCS)
9. Abby Murray (UROP CCS)
10. Danielle Newport (UROP)
11. Julia Stuart (UROP)
12. Nilay Thumme (UROP)

13. Han Tran (UROP)

### **PRESENTATIONS AND WORKSHOPS**

- **Tata-Cornell Institute for Agriculture and Nutrition**, Expert Session. Invited Workshop Attendee (2022).
- **NASA Land Cover Land Use Change (LCLUC)**, Urban and Agriculture Hotspots Seminar. Invited Seminar (2022).
- **Swedish University for Agricultural Sciences**, Crop Production Seminar. Invited Seminar (2021).
- **Indiana University**, Department of Geography. Invited Seminar (2021).
- **Workshop on Data-Driven Humanitarian Mapping**. Invited Panelist (2021).
- **Human-Water Systems Monthly**. Invited Seminar (2021).
- **Boston College**, Department of Earth & Environmental Sciences. Invited Seminar (2021).
- **International Water Management Institute (IWMI)**, SoLar Webinar. Invited Presentation (2021).
- **Clark University**, Department of Geography. Invited Seminar (2021).
- **Columbia University**, International Research Institute for Climate and Society (IRI). Invited Seminar (2020).
- **NASA LCLUC Conference**. Invited Presentation (2018, 2020), Attendee (2017, 2019). Poster (2012, 2013).
- **Standing Panel on Impact Assessment (SPIA) Workshop on Remote Sensing**. Invited Presentation (2020)
- **Global Land Project (GLP)**. Oral Presentation (2014, 2019). Session organizer (2019).
- **Sustainability and Development Conference**. Oral Presentation (2019). Conference Steering Committee (2019).
- **Workshop in Environmental Economics and Data Science (TWEEDS)**. Invited Speaker (2019).
- **Workshop on Quantifying Error in Training Data for Remote Sensing**, Clark University. Invited Speaker and Workshop Attendee (2019).
- **Yale University**, School of the Environment. Invited Seminar (2018).
- **Bill and Melinda Gates Foundation** Grand Challenges Meeting. Sponsored Attendee (2018).
- **University of Chicago**, Energy Policy Institute. Invited Seminar (2018).
- **American Geophysical Union (AGU)**. Invited Presentation (2013, 2017 – 2 presentations), Oral Presentation (2016, 2018 – 2 presentations), Poster (2014, 2015), Attendee (2020, 2021).

- **Natural Capital Project**, Workshop on Linking Ecosystem Services & Earth Observations. Invited Workshop Attendee (2017-2018).
- **NASA South/Southeast Asian Research Initiative (SARI)**. Invited Presentation (2017).
- **Association of Environmental and Resource Economists (AERE)**. Invited Presentation (2017).
- **National Socio-Economic Synthesis Center Workshop (SESYNC)** Observing Rural Development from Space. Invited Workshop Attendee (2017).
- **American Association of Geographers (AAG)**. Invited Presentation (2016). Oral Presentation (2012).
- **Toward Sustainable Groundwater in Agriculture Conference**. Invited Presentation (2016).
- **International Conference on Global Food Security**. Poster Presentation (2015).

**Grant Reviewer:** NSF and NASA (4 panels; ad-hoc reviewer).

**Journal Reviewer:** Nature, Nature Sustainability, Nature Communications, Nature Food, Science Advances, Proceedings of the National Academy of Sciences, Scientific Reports, Global Change Biology, Global Environmental Change, Environmental Research Letters, Remote Sensing of Environment, Ecology Letters, Geophysical Research Letters, Remote Sensing, Ecology and Society, Journal of Development Economics, International Journal of Remote Sensing, Regional Environmental Change, Human Ecology, World Development, Climate and Development, Climate Risk Management, the World Bank Economic Review.

**Member:** American Geophysical Union (AGU), Global Land Project (GLP), NASA Land Cover and Land Use Change (LCLUC) Program