

J.M. Shawn Hutchinson, Ph.D., GISP

Professor

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CV

Education

Ph.D., Geography, Kansas State University (2000). Estimating Tallgrass Prairie Soil Moisture using Active Satellite Microwave Imagery and Optical Sensor Inputs. (Advisor: Dr. John A. Harrington, Jr.)

M.A., Geography, Kansas State University (1997). Radar Backscatter-Soil Moisture Relationships over Tallgrass Prairie (Advisor: Dr. John A. Harrington, Jr.)

B.S., Wildlife Biology (Minor, Range Ecology), Colorado State University (1990). *Cum Laude* and *Distinguished Military Graduate*.
Advisor: Dr. Dale Hein

Other Credentials

Certified Geographic Information Systems Professional (GISP), 2013 – Present, GIS Certification Institute, Certificate No. 50908.
Effective Teaching Practices, 2019 – Present, Association of College and University Educators, ACUE-18375387.

Academic Interests

Research:	Environmental Assessment and Modeling Grassland Vegetation Phenology and Trends Military Training Land Sustainability	Agricultural Biosecurity Surface Water Resources Geographic Information Science and Technology
Teaching:	Geographic Information Systems Digital Cartography Satellite Remote Sensing Geocomputational Methods Biogeography	Programming and Scripting Geographic Visualization Digital Image Processing Water Resources Physical Geography
Places:	U.S. Great Plains France	China

Professional Experience

Professor, Department of Geography, Kansas State University; 2018 – Present.

Associate Professor, Department of Geography, Kansas State University; 2007 – 2018.

Visiting Researcher, Laboratoire de Télédétection et de Gestion des Territoires, Université de Toulouse, Ecole d'Ingénieurs de Purpan, Toulouse, France (September 2009 – May 2010)

Assistant Professor, Department of Geography, Kansas State University; 2002 – 2007.

Director, Geographic Information Systems Spatial Analysis Laboratory (GISSAL), Department of Geography, Kansas State University; 2002 – Present.

Geographic Information Systems Coordinator, Kansas State University; 2000 – 2002

Visiting Assistant Professor, Department of Geography, Kansas State University; 2001 – 2002.

Associate Director, Geographic Information Systems Spatial Analysis Laboratory (GISSAL), Department of Geography, Kansas State University; 2001 – 2002.

Visiting Assistant Professor, Department of Biological and Agricultural Engineering, Kansas State University; 2000 – 2001.

Adjunct Professor, Department of Geography, Kansas State University; 2000 – 2001.

Graduate Research Assistant, Department of Geography, Kansas State University; 1998.

Geographic Information Systems Manager, National Institute for Land Management and Training, Kansas State University; 1997 – 1998.

Graduate Research Assistant, Department of Geography and Division of Biology, Kansas State University; 1995 – 1997.

U.S. Army Engineer Officer, Platoon Leader (2nd Lieutenant) to Brigade Staff Officer (Captain); 1991 – 1995. [See *Military Experience* section at end for more information].

Publications, Reports, and Other Scholarly Works (* = Peer-Reviewed; _ = Student Author)

- 2020: *McDonough, K.R., S.L. Hutchinson, and J.M.S. Hutchinson. 2020. Declining soil moisture threatens water availability in the U.S. Great Plains. *Transactions of the American Society of Agricultural Engineers* 63(5):1147-1156. doi.org/10.13031/trans.13773
- *McDonough, K.R., S.L. Hutchinson, J. Liang, T. Hefley, and J.M.S. Hutchinson. 2020. Spatial configurations of land cover influence flood regulation ecosystem services. *Journal of Water Resources Planning and Management* 146(11):04020082. doi.org/10.1061/(ASCE)WR.1943-5452.0001294.
- 2019: *Muche, M., S.L. Hutchinson, J.M.S. Hutchinson, and J.M. Johnston. 2019. Phenology-adjusted dynamic curve number for improved hydrologic modeling. *Journal of Environmental Management* 235:403-413. doi.org/10.1016/j.jenvman.2018.12.115
- *Sullins, D.S., D.A. Haukos, J.M. Lautenback, J.D. Lautenbach, S.G. Robinson, M.B. Rice, B.K. Sandercock, J.D. Kraft, R.T. Plumb, J.H. Reitz, J.M. Shawn Hutchinson, and C.A. Hagen. 2019. Strategic conservation for lesser prairie chickens among landscapes of varying anthropogenic influence. *Biological Conservation* 238:108313. doi.org/10.1016/j.biocon.2019.108213
- 2018: *Braget, M., D.G. Goodin, J. Wang, J.M.S. Hutchinson, and K. Alexander. 2018. Flooded area classification using pooled training samples: An example from the Chobe River Basin, Botswana. *Journal of Applied Remote Sensing* 12(2). doi.org/10.1117/1.JRS.12.026033
- *McDonough, K.R., S.L. Hutchinson, J.M.S. Hutchinson, J.L. Case, and V. Rahmani. 2018. Validation and assessment of SPoRT-LIS surface soil moisture estimates for water resources management applications at the basin scale. *Journal of Hydrology* 566:43-54. doi.org/10.1016/j.jhydrol.2018.09.007
- *Rijal, S., G. Wang, P.B. Woodford, H.R. Howard, J.M.S. Hutchinson, S.L. Hutchinson, J. Schoof, T.J. Oyana, R. Li, and L.O. Park. 2018. Detection of gullies in Fort Riley military installation using LiDAR derived high resolution DEM. *Journal of Terramechanics* 77:15-22. doi:10.1016/j.jterra.2018.02.001
- 2017: *McDonough, K.R., S.L. Hutchinson, T. Moore, and J.M.S. Hutchinson. 2017. Analysis of trends in ecosystem services research. *Ecosystem Services* 25:82-88. doi.org/10.1016/j.ecoser.2017.03.022
- 2016: *Jacquin, A., M. Goulard, J.M.S. Hutchinson, T. Devienne, and S.L. Hutchinson. 2016. A statistical approach for predicting grassland degradation in disturbance-driven landscapes. *Journal of Environmental Protection* 7(6):912-925. doi.org/10.4236/jep.2016.76081
- *Rahmani, V., S.L. Hutchinson, J.A. Harrington, Jr., and J.M. Shawn Hutchinson. 2016. Analysis of frequency and magnitude of extreme rainfall events with potential impacts on flooding: A Case study from the central United States. *International Journal of Climatology* 36:3578-3587. doi.org/10.1002/joc.4577
- 2015: *Hutchinson, J.M.S., A. Jacquin, S.L. Hutchinson, and J. Verbesselt. 2015. Monitoring vegetation change and dynamics on U.S. Army training lands using satellite image time series analysis. *Journal of Environmental Management* 150:355-366. doi.org/10.1016/j.jenvman.2014.08.002
- *Rahmani, V., S.L. Hutchinson, J.A. Harrington, Jr., J.M.S. Hutchinson, and A. Anandhi. 2015. Analysis of temporal and spatial distribution and change points for annual precipitation in Kansas, USA. *International Journal of Climatology* 35:3879-3887. doi.org/10.1002/joc.4252).
- 2014: *Ghimire, K., M.W. Dulin, R.L. Atchison, D.G. Goodin, and J.M.S. Hutchinson. 2014. Identification of windbreaks in Kansas using object-based image analysis, GIS techniques, and field survey. *Agroforestry Systems* 88:865-875. doi.org/10.1007/s10457-014-9731-4).
- *Rahmani, V., Hutchinson, S.L., Hutchinson, J.M.S., and Anandhi, A. 2014. Extreme daily rainfall event distribution patterns in Kansas. *Journal of Hydrologic Engineering* 19(4):707-716.
- Hutchinson, S.L. and J.M.S. Hutchinson. 2014. Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection to Enhance Training Land Sustainability – Final Report for ESTCP Project Number S08-20. Arlington, VA: Environmental Science and Technology Certification Program.
- 2013: *Pockrandt, B., J.A. Harrington, Jr., J.M.S. Hutchinson. 2013. Maps and Locals: Using Landsat image analysis to document Eastern Red Cedar expansion in the northern Flint Hills. *Papers in Applied Geography* 36:309-315.
- *Raghavan, R.K., J.A., Harrington, Jr., G.A. Anderson, J.M.S. Hutchinson, and B.M. DeBey. 2013. Environmental, climatic, and residential neighborhood determinants of feline tularemia. *Vector-Borne and Zoonotic Diseases* 13(7):449-456.
- *Semeao, A.A., J.F. Campbell, J.M.S. Hutchinson, R.J. Whitworth, and P.E. Sloderbeck. 2013. Spatio-temporal distribution of stored-product pests around food processing and storage facilities. *Agriculture, Ecosystems, and Environment* 165:151-162.
- 2012: *Sutrave S., C. Scoglio, S.A. Isard, J.M.S. Hutchinson, K.A. Garrett. 2012. Identifying highly connected counties compensates for resource limitations when evaluating national spread of an invasive pathogen. *PLoS ONE* 7(6): e37793. doi:10.1371/journal.pone.0037793
- *Raghavan, R.K., K.M., Brenner, J.J. Higgins, J.M. Shawn Hutchinson, K.R. Harkin. 2012. Neighborhood-level socioeconomic and urban land use risk factors of canine leptospirosis: 94 cases (2002–2009). *Preventive Veterinary*

- Medicine* 106:324-331.
- 2011: *Raghavan, R.K., K.M., Brenner, J.J. Higgins, J.M. Shawn Hutchinson, K.R. Harkin. 2012. Evaluations of hydrologic risk factors for canine leptospirosis: 94 cases (2002-2009). *Preventive Veterinary Medicine* 107(1-2):105-109.
- *Hutchinson, J.M.S., J.F. Campbell, M.D. Toews, T.J. Vought, Jr., and S.B. Ramaswamy. 2011. Designing a Local-Scale Microsimulation of Lesser Grain Borer Population Dynamics and Movements. Chapter 10 in GIS Applications in Agriculture, Volume Three: Invasive Species, S. Clay, ed. Boca Raton, FL: CRC Press.
- 2010: Daniels, R., E. Martinson, R. Atchison, and J.M.S. Hutchinson. Kansas Statewide Forest Assessment and Research Strategy. Manhattan, KS: Kansas State University.
- *Hutchinson, S.L. and J.M.S. Hutchinson. Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection to Enhance Training Land Sustainability – Demonstration Plan for ESTCP Project Number S08-20. Arlington, VA: Environmental Science and Technology Certification Program.
- Margosian, M.L., K.A. Garrett, J.M. Shawn Hutchinson, K.W. With, C. Scoglio, and P. Westhoff. 2010. Changes in Agricultural Crop Connectivity and Disease Susceptibility over the Last Century. *ESRI Map Book*, Vol. 25, p. 77. Redlands, CA: ESRI Press.
- *Tuppad, P., K.R. Douglas-Mankin, J.K. Koellier, J.M.S. Hutchinson. 2010. SWAT discharge response to spatial rainfall variability in a Kansas watershed. *Transactions of the ASABE* 53(1):65-74.
- *Tuppad, P., K.R. Douglas-Mankin, J.K. Koelliker, J.M.S. Hutchinson, M.C. Knapp. 2010. NEXRAD Stage III precipitation local bias adjustment for streamflow prediction. *Transactions of the ASABE* 53(5):1511-1520.
- Vought, Jr., T.J., J.M. Shawn Hutchinson, R. Daniels, and L. McKinney. 2010. Integrating Wheat Quality Data with Online Mapping to Enhance International Grain Purchases. *ESRI Map Book*, Vol. 25, p. 76. Redlands, CA: ESRI Press.
- 2009: *Thomas, Kathryn A., Monica M. McTeague, Anne Cully, Keith Schulz, and J.M. Shawn Hutchinson. 2009. Vegetation Classification and Distribution Mapping Report: Petrified Forest National Park. Natural Resources Technical Report NPS/SCPN/NRTR-2009/273. Fort Collins, CO: U.S. Department of the Interior, National Park Service, Natural Resource Program Center.
- *Margosian, M.L., K.A. Garrett, J.M.S. Hutchinson, and K.A. With. 2009. Connectivity of the American Agricultural Landscape: Assessing the National Risk of Crop Pest and Disease Spread. *BioScience* 59(2):141-151.
- *Allen, L.J.S., C.L. Wesley, R.D. Owen, D.G. Goodin, D. Koch, C.B. Jonsson, Y. Chu, J.M.S. Hutchinson, and R.L. Paige. 2009. A habitat-based model for the spread of Hantavirus between reservoir and spillover species. *Journal of Theoretical Biology* 260(4):510-522.
- *Dulin, M.W., J.M.S. Hutchinson, and R.A. Atchison. 2009. Identifying and assessing windbreaks in Ford County, Kansas using object-based image analysis. *Papers and Proceedings of the Applied Geography Conference* 32:332-341.
- *Steichen, J.M., S.L. Hutchinson, N. Zhang, J.M. Shawn Hutchinson, C. Oviatt, A. Anderson, T. Keane, P.L. Barnes. 2009. Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality - Project SI-1339 Final Report. Arlington, VA: Strategic Environmental Research and Development Program.
- 2008: Harrington, J.A., Jr. and J.M.S. Hutchinson. 2008. Across the curriculum: The GIScience development strategy at K-State. Proceedings of the ESRI International User Conference, San Diego, CA.
- 2007: *Kim, I.J., S.L. Hutchinson, J.M.S. Hutchinson, and C.B. Young. 2007. Riparian Ecosystem Management Model (REMM): Sensitivity to soil, vegetation, and weather input parameters. *Journal of American Water Resources Association* 43(5):1171-1182.
- Vought, Jr., T.J. and J.M. Shawn Hutchinson. 2007. Assessing the vulnerability of U.S. livestock to agricultural biological terrorism (map). *ESRI Map Book*, Vol. 22, p. 48. Redlands, CA: ESRI Press.
- Margosian, M.L., K.A. Garrett, J.M.S. Hutchinson, and K. With. 2007. Connectivity of the American Agricultural landscape: A graph-theoretic approach. 2007 ESRI International User Conference Proceedings, Redlands, CA.
- Bernard, E., D. Andresen, J.M.S. Hutchinson. 2006. Linking chemical information with geodatabase features via Web services. 2006 ESRI International User Conference Proceedings, Redlands, CA.
- 2006: *Hutchinson, J.M.S., T.J. Vought, Jr., and S.L. Hutchinson. 2006. Continuous soil moisture mapping using MODIS LST and NDVI products. *Papers of the Applied Geography Conference* 29:140-149.
- *Goodin, D.G., D.E., Koch, R.D., Owen, J.M.S. Hutchinson, and C.B. Jonsson. 2006. Land cover associated with hantavirus presence in Paraguay. *Global Ecology and Biogeography* 15:519-527.
- Hutchinson, Shawn. 2006. Responding to the threat of agricultural bioterrorism. *Directions Magazine* (Nov. 9). <http://www.directionsmag.com/entry/responding-to-the-threat-of-agricultural-bioterrorism/122999>.
- Lee, M., K.R. Mankin, J.M.S. Hutchinson. 2006. GIS Structure for Water Quality Trading. Paper No. MC06-4102 presented at the 2006 Mid-Central Section Meeting of the American Society of Agricultural and Biological Engineers. ASABE, 2950 Niles Rd., St. Joseph, MI 49085-9659.
- 2005: Aiken, R.M., D.J. Inloes, and J.M.S. Hutchinson. 2005. Precipitation maps: Can they support a regional water balance? Kansas State University Agronomic Field Research, Northwest Research and Extension Center. Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, Kansas 66506.
- 2004: *Goodin, D.G., J. Gao, J.M.S. Hutchinson. 2004. Seasonal, topographic, and burn frequency effects on biophysical/spectral reflectance relationships in tallgrass prairie. *International Journal of Remote Sensing*

- 25(23):5429-5445.
- *Hutchinson, J.M.S., J.A. Harrington, Jr., and L.J. Marzen. 2004. Geospatial Contributions to Watershed-Scale Surface Water Quality Modeling. In D.G. Janelle, B. Warf, and K. Hanson, eds. *World Minds: Geographical Perspectives on 100 Problems*, 556-570. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Hutchinson, S.L., P.L. Barnes, J.M.S. Hutchinson, C.G. Oviatt, J. Steichen, and N. Zhang. 2004. Protecting Surface Water from Military Activity with Riparian Buffers and Low Water Stream Crossings. Paper No. 701P0904 presented at the 2004 ASAE/CSAE International Meeting. ASAE, 2950 Niles Rd., St. Joseph, MI 49085-9659.
- Engel, B.A., J. Choi, L. Theller, K.J. Lim; supporting authors J. Harrington, L. Harrington, S. Hutchinson. 2004. Geographic information systems (GIS) Technology. Chapter 15 in *Carcass Disposal: A Comprehensive Review*. Report prepared by National Agricultural Biosecurity Center Consortium, Carcass Disposal Working Group. CD and online at <http://fss.k-state.edu>. National Agricultural Biosecurity Center, Kansas State University, Manhattan, Kansas. 37 pp.
- Kim, I.J., S.L. Hutchinson, and J.M.S. Hutchinson. 2004. Assessment of Flow Paths in Upland Areas and Vegetated Buffers. Paper No. 042003 presented at the 2004 ASAE/CSAE International Meeting. ASAE, 2950 Niles Rd., St. Joseph, MI 49085-9659.
- 2003: *Hutchinson, J.M.S. 2003. Estimating near surface soil moisture using active microwave satellite imagery and optical sensor inputs. *Transactions of the American Society of Agricultural Engineers* 46(2):225-236.
- *Hutchinson, J.M.S., N.J. Leathers, J. Herynk, L.R. Campbell, and J.C. Reese. 2003. Agricultural plant pathogen disease pathways: Predicting the dispersal of exotic soybean aphids. *Papers and Proceedings of the Applied Geography Conference* 26:471-478.
- *Stansberry, B.M., J.M.S. Hutchinson, C.D. Becker, P.S. Gipson, T.H. Parker. 2003. Settlement patterns of forest birds in a prairie landscape. *Papers and Proceedings of the Applied Geography Conference* 26:479-487.
- *Brown, T.L., J.M.S. Hutchinson, J.A. Harrington, Jr., and M. Lu. 2003. Classification of natural characteristics and anthropogenic stressors in Kansas watersheds. *Papers and Proceedings of the Applied Geography Conference* 26:416-423.
- 2002: *Bhuyan, S.J., K.R. Mankin, J.M.S. Hutchinson, D.G. Goodin, J.K. Koelliker. 2002. Deriving land cover of a large agricultural watershed from multiple Landsat scenes. *Journal of Environmental Hydrology*, Paper 6, Volume 10 (www.hydroweb.com/journal-hydrology.html).
- *Hutchinson, J.M.S., J.A. Harrington, Jr., and L.J. Marzen. 2002. Geographic applications in nonpoint source pollution assessment. *Papers and Proceedings of the Applied Geography Conference* 25:18-26.
- Hutchinson, S.L., I.J. Kim, J.M.S. Hutchinson. 2002. Riparian Ecosystem Management Model Parameter Selection Using a Geographic Information System. Paper No. 022115 presented at the 2002 ASAE International Meeting. ASAE, 2950 Niles Rd., St. Joseph, MI 49085-9659.
- 2001: Hutchinson, J.M.S. 2001. Radar estimates of soil water content across vegetated watersheds. Paper No. 012222 presented at the 2001 ASAE International Meeting. ASAE, 2950 Niles Rd., St. Joseph, MI 49085-9659.
- 1999: *Goodin, D.G., J.M.S. Hutchinson, R.L. Vanderlip, and M.C. Knapp. 1999. Estimating Solar Irradiance for Crop Modeling using Daily Air Temperature Data. *Agronomy Journal* 91(5):845-851.
- 1998: *Hutchinson, J.M.S. 1998. Extracting Soil Moisture Information from ERS-1 SAR Imagery. *Applied Geographic Studies* 2(3):177-194.
- *Hutchinson, J.M.S. and B.C. Rundquist. 1998. Spatial Modeling of Net Radiation over Heterogenous Terrain. *Papers and Proceedings of the Applied Geography Conference* 21:416-423.
- 1997: *Hutchinson, J.M.S. 1997. Radar Backscatter - Soil Moisture Relationships over Tallgrass Prairie. *Papers and Proceedings of the Applied Geography Conference* 20:318-326.

Extramural Funding (* = Current Projects)

- 2021: Peterson, B., J.M.S. Hutchinson, and R. Sharp. 2021. Using ADS-B Data to Understand Overflight Travel Patterns at National Park Units. U.S. Department of Interior, National Park Service, \$149,382.
- 2020: *Hutchinson, J.M.S. and H. Onuoha. 2020. KansasView Mini-Grant, KansasView Consortium, University of Kansas, \$1,800.
- 2019: Hutchinson, J.M.S. and H. Onuoha. 2019. KansasView Mini-Grant, KansasView Consortium, University of Kansas, \$500.
- *Temme, A. and J.M.S. Hutchinson. 2019. Disaggregating SSURGO Soil Maps across Large Areas using Existing Qualitative Knowledge and Modern Data Sources. Soil Science Collaborative Research Proposals USDA-NRCS-NHQ-SOIL-19-GEN0010134, \$206,975.
- 2015: Hutchinson, J.M.S. 2015. EARSeL International Symposium/Workshop on Temporal Analysis of Satellite Images. Faculty Development Award, Kansas State University, \$1,800.
- Hutchinson, J.M.S. 2015. French-U.S. Partnership for Environmental Monitoring and Grassland Vegetation Assessment. Office of International Programs, Kansas State University, \$1,400.

- 2014: Hutchinson, J.M.S. and J.A. Harrington, Jr. 2014. Promoting Transdisciplinary GIScience Research at Kansas State University. Academic Excellence Fund, Kansas State University, \$8,000.
- 2013: Andresen, D., S. Brown, J.M.S. Hutchinson, E. Vasserman. 2013. CC-NIE Network Infrastructure: KGAP: Bridging the Gap in Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University. Division of Advanced Computing Infrastructure (ACI), National Science Foundation, \$499,113.
Hutchinson, J.M.S. and J.A. Harrington, Jr. 2013. Promoting Transdisciplinary GIScience Research at Kansas State University. Academic Excellence Fund, Kansas State University, \$4,000.
Hutchinson, J.M.S. 2013. Applying Landscape Connectivity to Model the Spread of Plant Pathogens. USDA-APHIS-PPQ-CPHST, \$20,000.
- 2012: Hutchinson, J.M.S. 2012. Mapping and Spatial Analysis Support for USAid/Ghana METTS Program. USAid and KSU Department of Agricultural Economics (PI), \$15,000.
- 2011: Hutchinson, J.M.S., K. Garrett, and C. Scoglio. 2011. Landscape Connectivity Pest Spread Model – Development and Support. USDA-APHIS-PPQ-CPHST, \$20,000.
- 2010: Hutchinson, J.M.S. and R. Daniels. 2010. Object-based Classification of Riparian Vegetation. Blue Earth LLC, \$11,320.
- 2009: *Bowman-James, K. (PI). 2009. Phase VI: Climate Change and Energy: Basic Science, Impacts, and Mitigation. NSF EPSCoR, \$20,000,000 (10/1/2009-9/30/2014). Sub-Project: Climate Change and Mitigation. Co-PIs: J. Blair, G. Hettiarachchi, S.L. Hutchinson, C. Rice, J. Feddema, J. Harrington, S. Staggenborg, D. Mechem, C. Ma, J.M.S. Hutchinson. \$4,000,000
Hutchinson, J.M.S. 2009. Kansas Forest Service State Assessment and Resource Strategy. Kansas Forest Service, \$26,340.
Hutchinson, J.M.S. and R. Daniels. 2009. Kansas Watershed Restoration and Protection Strategies – Middle Kansas-Soldier Creek. Blue Earth LLC, \$24,000.
- 2008: Hutchinson, S.L. and J.M.S. Hutchinson. 2008. Fort Riley Range and Training Land Assessment Program. Fort Riley Integrated Training Area Management Program and U.S. Geological Survey, \$1,200,000.
Hutchinson, J.M.S., K.A. Garrett, and C. Scoglio. 2008. Applying Landscape Connectivity to Model the Spread of Plant Pathogens. USDA-APHIS-PPQ-CPHST, \$74,176.
Hutchinson, J.M.S. and Robert Atchison. 2008. Conserving, Renovating, and Establishing Working Field Windbreaks. U.S. Forest Service Western Competitive Grant Program, \$78,202.
- 2007: *Hutchinson, J.M.S. and S.L. Hutchinson. 2007. Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection to Enhance Training Land Sustainability. Environmental Science and Technology Certification Program (ESTCP), \$676,431.
- 2006: Harrington, John, Doug Goodin, and J.M.S. Hutchinson. 2006. Improving the Research Experience for Geographic Information Science Students. NASA in Kansas Space Grant, \$54,750.
Harrington, J.A., Jr., J.M.S. Hutchinson, and R.A. Marston. 2006. Global GIS Place-Based Field Research in the Antilles. Foreign Military Studies Office (FMSO), \$76,716.
Hutchinson, J.M.S. 2006. Web-based Visualization and Analysis Tool (WBV&AT). National Agricultural Biosecurity Center, Kansas State University, \$47,669.
Hutchinson, J.M.S. 2006. 24K National Hydrography Dataset Revision. Kansas GIS Policy Board, \$25,000.
- 2005: Hutchinson, J.M.S., J.A. Harrington, Jr. 2005. Geospatial Technology Infrastructure Enhancement Program – Phase II. Kansas State University Targeted Excellence Program, \$550,000.
Hutchinson, J.M.S. 2005. Kansas Forest Stewardship Assessment (SAP) Program. Kansas Forest Service, \$58,107.
Hutchinson, J.M.S., E. Bernard, and D. Andresen. 2005. GIS Functionality for the Environmental Knowledge and Assessment Tool (EKAT). Center for Hazardous Substance Research (Urban Operations Environmental Laboratory) and M2 Technologies, \$99,203.
Hutchinson, S.L. and J.M.S. Hutchinson. 2005. Green Topeka: Vegetated BMPs for Urban Stormwater Control. Cooperative agreement between the City of Topeka Water Pollution Control Division and Kansas State University, \$50,000/year for up to 5 years.
- 2004: Hutchinson, J.M.S., J.A. Harrington, Jr. 2004. Geospatial Technology Infrastructure Enhancement Program. Kansas State University Targeted Excellence Program, \$330,000.
- 2003: Jonsson, C.B., L. Allen, Y. Chu, R. Owens, D.G. Goodin, J.M.S. Hutchinson, E. Pontelli, D. Ranjan, S. Tran, M. Almiron. 2003. The Impact of Rapid Anthropogenic Land Cover Change in the Chaco and Interior Atlantic Forest in Paraguay on Hantavirus Ecology. National Institutes of Health, \$1,857,996.
Steichen, J., S.L. Hutchinson, P. Barnes, J.M.S. Hutchinson, D. Althoff, J. Oviatt, N. Zhang. 2003. Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality. Strategic Environmental Research and Development Program (SERDP), \$1,217,512.
Hutchinson, J.M.S. 2003. Vegetation Mapping of National Parks in the Southwestern United States. U.S. Dept. of Interior National Park Service, \$117,000.
Hutchinson, J.M.S. 2003. Travel to Paraguay in Support of Student Exchange and Research Activities. Faculty Development Award, Kansas State University, \$1,500.

- Hutchinson, J.M.S. 2003. Brownfield Maps of Contamination in Communities. Great Plains Hazardous Substance Research Center, \$20,000.
- Hutchinson, J.M.S. 2003. West Nile Virus Monitoring and Mapping. Kansas Department of Health and Environment and Department of Entomology, Kansas State University, \$5,000.
- Reese, J., J.M.S Hutchinson, and J. Campbell. 2003. Post Hoc Exercise on the Spread of a Potential Bioterrorism Agent. USDA Animal and Plant Health Inspective Service (APHIS) and the KSU National Agricultural Biosecurity Center. \$70,395.
- 2002: Goodin, D.G., J.A. Harrington, Jr., and J.M.S. Hutchinson. 2002. HYSPIRE: Hyper-Spectral Remote Sensing of Kansas Rural Environments. NASA, \$292,709.
- Hutchinson, J.M.S. 2002. GPS Base Station Operation and Technical Support. Kansas Department of Administration, \$39,000.
- 2001: Hutchinson, J.M.S. and J.A. Harrington, Jr. 2001. Soil Survey Geographic (SSURGO) Digitization. USDA Natural Resources Conservation Service, \$25,000
- Hutchinson, J.M.S. 2001. Geographic Information System Support for High Plains Dairy Suitability Assessment. Department of Animal Sciences, Kansas State University, \$6,000.
- Bernard, E. and J.M.S. Hutchinson. 2001. Human Resources GIS Database and Map Development. Union Pacific Railroad, \$1,700.
- 2000: Mankin, K.R., J.K. Koelliker, J.A. Harrington, and J.M.S. Hutchinson. 2000. Kanopolis Watershed Water Quality Assessment. Kansas Department of Health and Environment (KDHE), \$385,995.
- 1999: Seyler, H.L. (continued by Harrington, J.A. and J.M.S. Hutchinson). 1999. Soil Survey Geographic (SSURGO) Soils Recompilation and Digitizing (Kansas and Colorado). USDA Natural Resources Conservation Service, \$102,500 (two year award).
- Seyler, H.L. (continued by J.A. Harrington and J.M.S. Hutchinson). 1999. Development of a GIS for Marais des Cygnes Wildlife Refuge. U.S. Fish and Wildlife Service, 23,000 (two year award).
- 1998: Hutchinson, J.M.S. 1998. Research and Development Grant for Low-Cost Radar Imagery. European Space Agency, \$8,000.

Invited Presentations

- 2020: Hutchinson, J.M.S. 2020. Exploring Recent Trends in Vegetation and Surface Soil Moisture Conditions across the U.S. Great Plains. Department of Geosciences, Middle Tennessee State University. September 23, 2020.
- 2017: Hutchinson, J.M.S. 2017. Geography Illustrated. Leonardo Art Science Evening Rendezvous (LASER), Kansas State University. November 16, 2017.
- Hutchinson, J.M.S. 2017. Visual-Tactile Learning with High-Tech Sandboxes. Aesthesia: A Multisensory Event. Marianna Kistler Beach Museum of Art, Kansas State University. March 2, 2017.
- 2016: Hutchinson, J.M.S. 2016. Monitoring Grassland Vegetation Condition and Trends for Water Resource Management. International Workshop for Water Resource Utilization and Management. China Three Gorges University, Yichang, China. June 8, 2016.
- Hutchinson, J.M.S. 2016. Monitoring Grassland Vegetation Condition and Trends using Moderate Resolution Satellite Image Time Series. College of Environment and Resources, Jilin University, Changchun, China. June 6, 2016.
- 2015: Hutchinson, J.M.S. 2015. Environmental Monitoring with Geospatial Technologies: Promoting Sustainable Military Training Lands. University of Dubuque. November 13, 2015.
- 2012: Hutchinson, J.M.S. 2012. Geographic Decision Support Systems: Monitoring Human Impacts on Grasslands. Zhejiang University (Hangzhou, Zhejiang, China). November 14, 2012.
- Hutchinson, J.M.S. 2012. Geographic Decision Support Systems: Monitoring Human Impacts on Grasslands. Jilin University (Changchun, Jilin, China). November 12, 2012.
- Hutchinson, J.M.S. 2012. Beyond Spatial Literacy: Enhancing the Land Grant Mission with Geospatial Intelligence and Planning. College of Earth, Ocean, and Atmospheric Sciences, Oregon State University. September 4, 2012.
- 2010: Hutchinson, J.M.S. and S.L. Hutchinson. 2010. Remote Sensing Techniques to Assess Vegetation and Training Land Condition. U.S. Army Sustainable Range Program, April, Online Conference.
- 2009: Hutchinson, J.M.S. 2009. The Geography of U.S. Animal Agriculture. Ecole Supérieure d'Agriculture de Purpan, October, Toulouse, France.
- 2006: Hutchinson, J.M.S. 2006. GIScience Research for Protecting Public Health and Food Supplies: Food Safety and Security Applications. Homeland Infrastructure Foundation Level Database (HIFLD) Working Group Meeting, February, Washington, D.C.
- 2005: Hubbard, M., J.A. Harrington, Jr., D. Goodin, and J.M.S. Hutchinson. 2005. Building Partnerships through the Development of a Digital Geoscience Atlas for Senegal. University Cheikh Anta Diop de Dakar (UCAD), February, Dakar, Senegal.

- Hutchinson, J.M.S., E. Bernard, J.A. Harrington, Jr., B. DeGroot, J. Stack, J. Reese, C. Kastner, and M. Vanier. 2005. Protecting Public Health and Food Supplies: GIScience Research for Understanding Plant, Animal, and Human Biohazard Interactions. February 2005. UCGIS Congressional Breakfast (sponsored by Senator Clinton and Representatives Maloney and Shays); Washington, D.C.
- 2004: Hutchinson, J.M.S. 2004. Remote Sensing of Soil Moisture. South China Agricultural University, October, Guangzhou, China.
- Hutchinson, J.M.S. 2004. Using GIS and Remote Sensing in Biophysical Research. Henan University, October, Zhengzhou, China.
- Hutchinson, J.M.S. 2004. GIS Applications in Agricultural Biosecurity. Jilin University-Kansas State University Joint Research Symposium, Jilin University, October, Changchun, China.
- Hutchinson, J.M.S. 2004. Using GIS and Remote Sensing in Biophysical Research – Recent Examples. Geology Seminar Series, Department of Geology, Kansas State University, March, Manhattan, Kansas.
- 2003: Hutchinson, J.M.S. 2003. Using GIS in Entomology: Predicting the Distribution of Soybean Aphids (*Aphis glycines*) in 2003. Department of Entomology, Kansas State University, September, Manhattan, Kansas.
- Hutchinson, J.M.S. 2003. Watershed Modeling and Geographic Information Systems. Kansas Water Environment Association Annual Conference, April, Topeka, Kansas.
- 2002: Hutchinson, J.M.S. 2002. GIS Applications in Agricultural Biosecurity. Seminar for the Carcass Disposal Working Group (CDWG) of the National Agricultural Biosecurity Center, December, Manhattan, Kansas.
- 2001: Hutchinson, J.M.S. 2001. Geographic Applications in Nonpoint Source Pollution Assessment. Seminar for the Gamma Theta Upsilon Geography Honor Society, Kansas State University, December, Manhattan, Kansas.
- 1999: Hutchinson, J.M.S. 1999. Spatial Modeling of Net Radiation over Heterogeneous Terrain. Seminar for the Remote Sensing and GIS Laboratory, Utah State University, June, Logan, Utah.
- 1998: Hutchinson, J.M.S. 1998. Radar Backscatter-Soil Moisture Relationships over Tallgrass Prairie. Department of Geography and Department of Plants, Soils, and Biometeorology Special Seminar, Utah State University, April, Logan, Utah.

Papers and Posters Presented at Professional Meetings

- 2021: Application of Global Climate Model Precipitation Data across the Blue River Watershed: A Cautionary Tale. January 27-29, 2021. Laura J. Krueger, J.M. Shawn Hutchinson, Stacy L. Hutchinson. Kansas Natural Resources Conference, Virtual Meeting.
- 2020: Expanding Soil Disaggregation Methods Using Existing SSURGO Data Across the North Central United States. August 11-13, 2020. Jordan Watson, Arnaud Temme, J.M. Shawn Hutchinson. USDA NRCS North Central Regional Cooperative Soil Survey Conference, Columbia, Missouri.
- Application of Global Climate Model Precipitation Data across the Blue River Watershed: A Cautionary Tale. November 9-10, 2020. Laura J. Krueger, J.M. Shawn Hutchinson, Stacy L. Hutchinson. Kansas Governor's Water Conference, Virtual Meeting.
- 2019: Earth Observations for Improved Ecosystem Service Estimates: Vegetation Development and Trends for Grasslands of the U.S. Great Plains, 2001-2017. October 21-25, 2019. J.M. Shawn Hutchinson, Hilda Onuoha, Douglas Goodin, Trisha Moore, and Jida Wang. Ecosystem Services Partnership (ESP) 10 World Conference, Hannover, Germany.
- 2018: Time Series Analysis of Phenometrics and Long-Term Grassland Trends across the Great Plains Ecoregion using Moderate Resolution Satellite Imagery. J.M. Shawn Hutchinson and Hilda Onuoha. July 9-12, 2018. 3rd Joint European Association of Remote Sensing Laboratories (EARSeL) and NASA Landuse/Landcover Change Workshop, Chania, Crete, Greece.
- Large Scale Soil Moisture Trend Analysis in the Missouri and Arkansas-Red-White River Basins. Stacy L. Hutchinson, K.R. McDonough, and J.M. Shawn Hutchinson and Hilda Onuoha. July 9-12, 2018. 3rd Joint European Association of Remote Sensing Laboratories (EARSeL) and NASA Landuse/Landcover Change Workshop, Chania, Crete, Greece.
- 2017: Time Series Analysis of Vegetation Phenometrics for the Flint Hills Ecoregion, 2001-2015. J.M. Shawn Hutchinson and Austin R. Braget. October 13, 2017. Regional Meeting of the GPRM Division of the American Association of Geographers, Grand Forks, ND.
- Time Series Analysis of Phenometrics and Long-Term Vegetation Trends for the Flint Hills Ecoregion using Moderate Resolution Satellite Imagery. J.M. Shawn Hutchinson and A.R. Braget. April 5-9, 2017. Annual Meeting of the American Association of Geographers, Boston, MA.
- 2016: Time Series Analysis of Vegetation Phenometrics for Military and Non-Military Lands using Moderate Resolution Satellite Imagery. J.M. Shawn Hutchinson, A. Jacquin, B. Pockrandt, and S.L. Hutchinson. March 29-April 2, 2016. Annual Meeting of the American Association of Geographers, San Francisco, CA.
- Phenology-adjusted Dynamic Curve Numbers for Improved Hydrologic Modeling. S.L. Hutchinson, J.M.S. Hutchinson, and M. Muche. August 29-September 1, 2016. EcoSummit 2016: Ecological Sustainability – Engineering Change,

- Montpellier, France.
- Phenology-adjusted Dynamic Curve Numbers for Improved Hydrologic Modeling. S.L. Hutchinson, J.M.S. Hutchinson, and M. Muche. October 21-22, 2016. Regional Meeting of the GPRM Division of the Association of American Geographers, Colorado Springs, CO.
- 2015: Time Series Analysis of Vegetation Phenometrics for Military and Non-Military Lands using Moderate Resolution Satellite Imagery. J.M. Shawn Hutchinson, A. Jacquin, B. Pockrandt, and S.L. Hutchinson. October 2-3, 2015. Regional Meeting of the GPRM Division of the Association of American Geographers, Kearney, NE.
- Time Series Analysis of Vegetation Phenometrics for Military and Non-Military Lands using Moderate Resolution Satellite Imagery. J.M. Shawn Hutchinson, A. Jacquin, B. Pockrandt, and S.L. Hutchinson. September 29-October 1, 2015. America's Grasslands Conference, Fort Collins, CO.
- A Statistical Approach for Predicting Grassland Degradation in Disturbance-driven Landscapes. A. Jacquin, M. Goulard, J.M. Shawn Hutchinson, and S.L. Hutchinson. July 22-24, 2015. 8th International Workshop on the Analysis of Multitemporal Remote Sensing Images (MultiTemp 2015). Annecy, France.
- Military Training and Fire Regime Impacts on Tallgrass Prairie Vegetation Degradation. A. Jacquin, M. Goulard, J.M. Shawn Hutchinson, and S.L. Hutchinson. June 17-18, 2015. 2nd International Workshop on Temporal Analysis of Satellite Images, European Association of Remote Sensing Laboratories (EARSeL). Stockholm, Sweden
- Sensitivity of TIMESAT-derived Phenometrics to Adaptive Savitzky-Golay Filters Applied to MODIS Time Series Data. J.M. Shawn Hutchinson, A. Jacquin, B. Pockrandt, N. Bloedow, and L. Murray. April 2015. Annual Meeting of the Association of American Geographers. Chicago, IL.
- Spatial Tools in Action: Fire Regime and Military Training Activity Explain Grassland Degradation. A. Jacquin, M. Goulard, J.M. Shawn Hutchinson, and S.L. Hutchinson. April 2015. Annual Meeting of the Association of American Geographers. Chicago, IL.
- Change of Amount of CO₂ Absorbed by Forest in Heilongjiang Province of the 20th Century. L. Zhang, L. Su, and J.M. Shawn Hutchinson. April 2015. Annual Meeting of the Association of American Geographers. Chicago, IL.
- 2014: Spatiotemporal Analysis of Growing Season Length and Freeze Dates as a Measure of Climate Change for Agricultural Producers in Kansas. McHaney, M., J.M.S. Hutchinson, A. Swamy. October 2014. Joint Regional Meeting of the SWAAG and GPRM Divisions of the Association of American Geographers, Albuquerque, NM.
- Monitoring Inter- and Intra-Annual Vegetation Dynamics on U.S. Army Training Lands using MODIS Composite Imagery and Temporal Decomposition Methods. J.M.S. Hutchinson, A. Jacquin, S.L. Hutchinson, and J. Verbesselt. October 2014. Joint Regional Meeting of the SWAAG and GPRM Divisions of the Association of American Geographers, Albuquerque, NM.
- Engaging Agricultural Stakeholders and Communicating Climate Change Risk with a WebGIS-based Crop Calendar. Su, L. and J.M.S. Hutchinson. October 2014. Joint Regional Meeting of the SWAAG and GPRM Divisions of the Association of American Geographers, Albuquerque, NM.
- 2013: Climate Change and Long Duration Rainfall Event Distribution in Kansas. Rahmani, V., S.L. Hutchinson, J.A. Harrington, Jr., J.M.S. Hutchinson, and A. Anandhi. October 2013. K-State Research and the State of Kansas, Manhattan, KS.
- Long-term Wet and Dry Period Trends in Kansas. Rahmani, V., S.L. Hutchinson, J.A. Harrington, Jr., J.M.S. Hutchinson, and A. Anandhi. October 2013. Kansas Water Conference, Manhattan, KS.
- Engaging Stakeholders with Data: Web-based GIS Tools for Communicating Climate Change and Variability. J.M.S. Hutchinson. October 2013. Climate Change and Energy: Basic Science, Impacts, and Mitigation; 2013 Kansas NSF EPSCoR Annual Meeting, Lawrence, KS.
- Risk Analysis of Water Control Structures in Agricultural Fields. Rahmani, V., S.L. Hutchinson, A. Anandhi, J.K. Koelliker, J.M.S. Hutchinson, and J.A. Harrington, Jr.. July 2013. American Society of Agricultural and Biological Engineers (ASABE) Annual International Meeting, Kansas City, MO.
- Climate Change Impacts on Available Water from Rainfall. Rahmani, V., S.L. Hutchinson, A. Anandhi, J.K. Koelliker, J.M.S. Hutchinson, and J.A. Harrington, Jr.. April 2013. Annual Environmental Engineering Conference, Lawrence, KS.
- 2012: Trend Analysis of Annual and Seasonal Rainfall in Kansas. Rahmani, V., S.L. Hutchinson, J.M.S. Hutchinson, and A. Anandhi. December 2012. International Meeting of the American Geophysical Union. San Francisco, CA.
- Historical Extreme Rainfall Events Analysis for Kansas. Rahmani, V., S.L. Hutchinson, J.M.S. Hutchinson, and A. Anandhi. July 2012. International Meeting of the American Association of Agricultural and Biological Engineers. Dallas, TX.
- Spatiotemporal Analysis of Vegetation Change and Fire Regime using Remotely-Sensed Imagery. J.M. Shawn Hutchinson, Anne Jacquin, Michel Goulard, and Stacy L. Hutchinson. February 2012. Annual Meeting of the Association of American Geographers. New York, NY.
- Fire History Reconstruction using Multisource Remote Sensing Data in Grassland Ecosystems. Anne Jacquin, Thomas Devienne, and J.M. Shawn Hutchinson. February 2012. Annual Meeting of the Association of American Geographers. New York, NY.
- Kansas Long-term Weather Analysis. Aavudai Anandhi, Stacy L. Hutchinson, Shawn Hutchinson, and Mary Knapp. January 2012. National Science Foundation Site Review for Climate Mitigation EPSCoR Grant. Manhattan, KS.
- 2011: Rapid Soil Erosion Assessment Modeling for Predicting Gully Locations on Military Training Lands. S.L. Hutchinson, J.M.

- Shawn Hutchinson. December 2011. SERDP and ESTCP Partners in Environmental Technology Technical Symposium & Workshop. Washington D.C.
- Real- or Near-Real Time Monitoring of Military Training Land Sustainability using Geospatial Techniques and Automated Sensor Deployments. September 2011. International Symposium on Erosion and Landscape Evolution (ASABE Specialty Conference). Anchorage, AK.
- Hutchinson, S.L. and J.M.S. Hutchinson. March 2011. Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection. National Military Fish and Wildlife Conference. Kansas City, MO.
- Monitoring Military Training and Sustainability at Fort Riley, Kansas in Real- or Near-Real Time using Geospatial Techniques and Automated Sensor Deployments. January 2011. Kansas Natural Resources Conference. Wichita, KS.
- 2010: Rapid Soil Erosion Assessment Modeling for Predicting Gully Locations on Military Training Lands. S.L. Hutchinson, J.M. Shawn Hutchinson, and P. Bussen. December 2010. SERDP and ESTCP Partners in Environmental Technology Technical Symposium & Workshop. Washington D.C.
- Rapid Monitoring and Assessment of Military Training Land Sustainability at Fort Riley, Kansas. J.M. Shawn Hutchinson, S.L. Hutchinson, P.B. Woodford, C. Otto. October 2010. Annual Meeting of the Great Plains-Rocky Mountain Division of the Association of American Geographers. Lawrence, Kansas.
- Redefining Military Training Land Sustainability. T.J., Vought, Jr., J.A. Harrington, Jr., J.M. Shawn Hutchinson, L.M.B. Harrington, S.L. Hutchinson. October 2010. Annual Meeting of the Great Plains-Rocky Mountain Division of the Association of American Geographers. Lawrence, Kansas.
- Fort Riley ITAM: A New Approach for Monitoring Military Training Land Sustainability. August 2010. 1st Annual Training Support System Workshop; Chicago, IL (J.M.S. Hutchinson, S.L. Hutchinson, P. Woodford, and C. Otto).
- Defining, Measuring, and Monitoring Sustainability on Military Training Lands. April 2010. Annual Meeting of the Association of American Geographers; Washington, DC (T. Vought, J.M.S. Hutchinson, S.L. Hutchinson, J.A. Harrington, Jr., and L.M.B. Harrington).
- Automated Extraction of Military Vehicle Tracks from Aerial Photography and Satellite Imagery at Fort Riley, Kansas. April 2010. Annual Meeting of the Association of American Geographers; Washington, DC (K. Franke, J.M.S. Hutchinson, S.L. Hutchinson).
- Hutchinson, S.L., J.M.S. Hutchinson, T. Vought, B. Lantz, and P. Woodford. January 2010. The Fort Riley Range and Training Land Assessment Program. Kansas Natural Resources Conference, February, Wichita, KS.
- 2009: Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment: nLS Model Overview and Sensitivity Analysis Results. December 2009. SERDP and ESTCP Partners in Environmental Technology Technical Symposium & Workshop; Washington, DC (S.L. Hutchinson and J.M.S. Hutchinson).
- Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection (SI-2017). December 2009. Watershed Process and Management Side Meeting, SERDP and ESTCP Partners in Environmental Technology Technical Symposium & Workshop; Washington, DC (S.L. Hutchinson, J.M.S. Hutchinson, and T.J. Vought, Jr.)
- Identifying and Assessing Windbreaks in Ford County, Kansas using Object-based Image Analysis. October 2009. Applied Geography Conference; Baton Rouge, LA (M. Dulin, J.M.S. Hutchinson, and R. Atchison).
- Integrating Wheat Quality Data with Online Mapping to Enhance International Grain Purchases. July 2009. ESRI International User Conference; San Diego, CA (T. Vought, Jr., J.M.S. Hutchinson, and L. McKinney)
- Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection to Enhance Training Land Sustainability. July 2009 ESRI International User Conference; San Diego, CA (J.M.S. Hutchinson, S.L. Hutchinson, J. Burkitt, and K. Franke)
- GIS-enabled Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection. April 2009. Capitol Research Summit, Topeka, KS (J. Burkitt, K. Franke, J.M.S. Hutchinson, and S.L. Hutchinson)
- Identifying and Assessing Windbreaks using Hierarchical Learning and Object-based Imagery Analysis. March 2009. Annual Meeting of the Association of American Geographers; Las Vegas, NV (M. Dulin, J.M.S. Hutchinson, and R. Atchison).
- The Efficacy of Natural Vegetative Barriers at Controlling Prairie Dog Dispersal in Shortgrass Prairie: Year 1 Results. March 2009. Annual Meeting of the Association of American Geographers; Las Vegas, NV (Z. Eddy, C. Lee, and J.M.S. Hutchinson).
- Integrating Wheat Quality Data with Online Mapping to Enhance International Grain Purchases. March 2009. Kansas State University Graduate Research Forum; Manhattan, KS (T. Vought, Jr., J.M.S. Hutchinson, and L. McKinney)
- GIS-enabled Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection. March 2009. Kansas State University Graduate Research Forum; Manhattan, KS (J. Burkitt, K. Franke, J.M.S. Hutchinson, and S.L. Hutchinson)
- The Kansas Forest Stewardship Spatial Analysis Project. March 2009. Kansas State University Graduate Research Forum; Manhattan, KS (M. Dulin, J.M.S. Hutchinson, and R. Atchison).

- Efficacy of Natural Vegetation Barriers at Controlling Prairie Dog Dispersal in Shortgrass Prairie The Kansas Forest Stewardship Spatial Analysis Project. . March 2009. Kansas State University Graduate Research Forum; Manhattan, KS (Z. Eddy, C. Lee, and J.M.S. Hutchinson).
- Identifying and Assessing Windbreaks in Ford County, Kansas using Object-based Image Analysis. January 2009. Kansas Natural Resource Conference; Wichita, KS (J.M.S. Hutchinson, M. Dulin, and R. Atchison).
- 2008: Connectivity of the American Agricultural Landscape: Applying Graph Theory to Assess the National Risk of Crop Pest and Disease Spread. August 2008. Ecological Society of America Annual Meeting; Milwaukee, WI (K. Garrett, M. Margosian, J.M. Shawn Hutchinson, and K. With).
- Across the Curriculum: The GIScience Development Strategy at Kansas State University. August 2008. ESRI International User Conference; San Diego, CA (J.A. Harrington, Jr. and J.M.S. Hutchinson).
- Connectivity of the American Agricultural Landscape: A Graph-Theoretic Approach using GIS. April 2008. Annual Meeting of the Association of American Geographers; Boston, MA (J.M. Shawn Hutchinson, M. Margosian, K. Garrett, and K. With).
- Kansas Forest Stewardship Program: Spatial Analysis Project. February 2008. Kansas Natural Resource Conference; Wichita, KS (J.M.S. Hutchinson, M. Dulin, and R. Atchison).
- 2007: Validating the Kinematic Wave Approach for Rapid Soil Erosion Assessment and Improved BMP Site Selection to Enhance Training Land Sustainability. December 2007. SERDP and ESTCP Partners in Environmental Technology Technical Symposium & Workshop; Washington, DC (S.L. Hutchinson and J.M.S. Hutchinson).
- Kansas Forest Stewardship Program: Spatial Analysis Project. June 2007. ESRI International User Conference; San Diego, CA (M. Dulin and J.M.S. Hutchinson).
- Connectivity of the American Agricultural Landscape. June 2007. ESRI International User Conference; San Diego, CA (M. Margosian, J.M. Shawn Hutchinson, K. Garrett, and K. With).
- Assessing the Impact of DEM Resolution in Determining Transitional Erosion Areas: A Case Study of a Small Watershed in Fort Riley, Kansas. June 2007. ESRI International User Conference; San Diego, CA (A. Kesarwani, J.M. Shawn Hutchinson, S.L. Hutchinson, and I.J. Kim)
- Kansas Forest Stewardship Spatial Analysis Project (SAP). April 2007. U.S. Forest Service Forest Stewardship Program Spatial Analysis Summit; Broomfield, CO (J.M.S. Hutchinson and R. Atchison).
- 2006: Impact of Land Use on Rodent-Hantavirus Dynamics in Paraguay. October 2006. EcoHealth ONE Conference; Madison, WI (D.G. Goodin, L.B. Allen, Y. Chu, J.M.S. Hutchinson, C.B. Jonsson, R.D. Owen, E. Pontelli, and S. Tran)
- Continuous Soil Moisture Mapping using MODIS LST and NDVI Products. October 2006. Applied Geography Conference; Tampa, FL (with T.J. Vought, Jr. and S.L. Hutchinson)
- Continuous Soil Moisture Mapping using MODIS LST and NDVI Products. August 2006. ESRI International User Conference; San Diego, CA (with T.J. Vought, Jr. and S.L. Hutchinson)
- Assessing the Vulnerability of U.S. Counties to Bioterrorism. August 2006. ESRI International User Conference; San Diego, CA (with T.J. Vought, Jr.)
- The Effects of Different Resolution DEMs in Determining Overland Flow Regimes. August 2006. Integrated Training Area Management (ITAM) Workshop; Manhattan, KS (S.L. Hutchinson, J.M.S. Hutchinson, I.J. Kim, and P.B. Woodford).
- A GIS-Enabled Kinematic Wave Approach for Calculating the Transition between Sheet and Concentrated Flows. August 2006. Integrated Training Area Management (ITAM) Workshop; Manhattan, KS (S.L. Hutchinson, J.M.S. Hutchinson, and I.J. Kim).
- Spatial and Temporal Analysis of Soil Moisture using MODIS NDVI and LST Product. August 2006. Integrated Training Area Management (ITAM) Workshop; Manhattan, KS (J.M.S. Hutchinson, T.J. Vought, Jr. and S.L. Hutchinson).
- Overview: Assessing the Impact of Maneuver Training on Nonpoint Source Pollution and Water Quality (Project #CP-1339). August 2006. Integrated Training Area Management (ITAM) Workshop; Manhattan, KS (J.M. Steichen, P.L. Barnes, S.L. Hutchinson, J.M.S. Hutchinson, P.B. Woodford, and N. Zhang).
- Agricultural Biosecurity and GIS: Overview and Applications. April 2006. MidAmerica GIS Symposium; Kansas City, MO (with Bradley De Groot and John Reese).
- GIS Structure for Water Quality Trading. April 2006. Mid-Central Regional Meeting of the American Society of Agricultural and Biological Engineers; Manhattan, KS (with M. Lee and K.R. Mankin).
- Rapidly Changing Demographics and Water Uses in the Arkansas River Basin. March 2006. 23rd Annual Water and the Future of Kansas Conference; Topeka, KS (with J.A. Harrington, Jr. and Nathan Kettle).
- Agricultural Biosecurity and GIS: A Site Evaluation Model for Mass Livestock Burial. March 2006. Annual Meeting of the Association of American Geographers; Chicago, IL.
- 2005: A GIS-Enabled Kinematic Wave Approach for Calculating the Transition between Sheet and Concentrated Flows. December 2005. Partners in Environmental Technology Symposium and Workshop; Washington, D.C. (with S.L. Hutchinson and I.J. Kim).
- Agricultural Emergency Management with GIS: Animal Carcass Disposal Modeling. November 2005. Applied Geography Conference; Washington, D.C. (with L. Emerson and S. Oko).
- GIScience Research for Protecting Public Health and Food Supplies: Food Safety and Security Applications. September

2005. ESRI Homeland Security GIS Summit; Denver, CO.
- Evaluation of Overland Flow Paths Generated from Multiresolution Digital Elevation Models. April 2005. Annual Meeting of the Association of American Geographers; Denver, CO (with S.L. Hutchinson and I.J. Kim).
- Protecting Public Health and Food Supplies: GIScience Research for Understanding Plant, Animal, and Human Biohazard Interactions. February 2005. UCGIS Congressional Breakfast (sponsored by Senator Clinton and Representatives Maloney and Shays); Washington, D.C. (with E. Bernard, J. Harrington, Jr., B. DeGroot, J. Stack, J. Reese, C. Kastner, and M. Vanier).
- 2004: Spatial Soil Moisture Estimates for Fort Riley, Kansas using MODIS Land Surface Temperature and Vegetation Index Products. November 2004. Partners in Environmental Technology Symposium and Workshop; Washington, D.C. (with S.L. Hutchinson and T. Vought).
- Predicting the Dispersal of the Soybean Aphid, *Aphis glycines*, using GARP Models. November 2004. Annual Meeting of the Entomological Society of America; Salt Lake City, UT (with L.R. Campbell, J. Reese, N. Leathers, and B. Stansberry).
- Predators and Their Habitats Revisited: A Diverse Carnivore Community and Their Habitat Associations in the Atlantic Forest of Paraguay. November 2004. Defenders of Wildlife's Carnivores 2004: Expanding Partnerships in Carnivore Conservation; Santa Fe, NM (with G.L. Zuercher, P.S. Gipson, R. Naidoo, and O. Carrillo).
- Spatial and Temporal Analysis of Soil Moisture using MODIS NDVI and LST Products. October 2004. Applied Geography Conference; St. Louis, MO (with T. Vought and S.L. Hutchinson)
- Utility of Base Reflectivity for Mapping Precipitation in the Central High Plains. October 2004. Annual Meeting of the AMS/NWA; Goodland, KS (with R. Aiken and D. Inloes).
- Soil Moisture Estimates using MODIS Land Surface Temperature and NDVI. August 2004. American and Canadian Societies of Agricultural Engineering sAnnual Conference; Ottawa, Ontario (with S.L. Hutchinson and S. Leis).
- Habitat Mapping in the Mbaracayu Forest Preserve, Paraguay, using Orthophotography and Landsat TM Imagery. May 2004. Annual Meeting of the American Society of Photogrammetry and Remote Sensing; Denver, CO (with R. Reker and D.G. Goodin).
- Predicting Future Geographic Distributions of Exotic Aphids in the United States using GIS-based Ecological Niche Models. April 2004. Annual Meeting of the Kansas (Central States) Entomological Society ; Lincoln, NE (with N. Leathers, B. Stansberry, J. Reese, and L. Campbell).
- Modeling Soybean Aphid (*Aphis glycines*) Range Distribution using GARP and Annual Rates of Spread. March 2004. Annual Meeting of the Association of American Geographers; Philadelphia, PA (with Nancy Leathers, John Reese, and Leslie Campbell).
- Land Cover Change and Deforestation in the Interior Atlantic Forest, Eastern Paraguay. March 2004. Annual Meeting of the Association of American Geographers; Philadelphia, PA (with Douglas Goodin and Ryan Reker).
- Classification of Natural Characteristics and Anthropogenic Stressors in Kansas Watersheds. March 2004. 21st Annual Water and the Future of Kansas Conference; Lawrence, KS (with T.L. Brown, J.A. Harrington, Jr., and Max Lu).
- Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality. March 2004. 21st Annual Water and the Future of Kansas Conference; Lawrence, KS (with S.L. Hutchinson, J. Steichen, P. Barnes, C. Oviatt, and N. Zhang).
- 2003: Home Range Size and Habitat Use by Upland Sandpipers *Bartramia longicauda* in an Experimental Landscape. December 2003. Midwest Fish and Wildlife Conference; Kansas City, MO (with Tony Mong, Brett Sandercock, and Karl Kosciuch).
- Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality. December 2003. Partners in Environmental Technology Symposium and Workshop; Washington, D.C. (with J. Steichen, P. Barnes, S.L. Hutchinson, C. Oviatt, N. Zhang, and P. Woodford).
- Climatology of Fort Riley, Kansas and Vicinity. November 2003. 26th Annual Applied Geography Conference; Colorado Springs, CO (with B. Hammerschmidt and N.L. Leathers).
- The Use of GIS Analysis in Monitoring the North American Distribution of *Aphis glycines* (Soybean Aphid). October 2003. 2003 Entomological Society of America Annual Meeting and Exhibition; Cincinnati, OH (with John Reese and Leslie Campbell).
- Findings from a Post-Hoc Exercise on the Spread of a Potential Bioterrorism Agent. October 2003. Annual Meeting of the Great Plains/Rocky Mountain Division of the Association of American Geographers; Manhattan, KS (with Nancy Leathers, John Reese, and Leslie Campbell).
- Kansas Watershed Classification Assessment to Vulnerability for Surface Water Quality. October 2003. Annual Meeting of the Great Plains/Rocky Mountain Division of the Association of American Geographers; Manhattan, KS (with Tracy Brown, John Harrington, and Max Lu).
- Topographic, Seasonal, and Fire Treatment Effects on Spectral Reflectance in Tallgrass Prairie. October 2003. Annual Meeting of the Great Plains/Rocky Mountain Division of the Association of American Geographers; Manhattan, KS (with Douglas Goodin and Jincheng Gao).
- Protecting Surface Water from Military Activity with Riparian Buffers and Low Water Stream Crossings. September 2003. ASAE Specialty Conference Self-Sustaining Solutions for Streams, Wetlands and Watersheds; St. Paul, MN (with S.L.

- Hutchinson, P.L. Barnes, C.G. Oviatt, J. Steichen, and N. Zhang).
 Monitoring and Predicting the Dispersal of Soybean Aphids (*Aphis glycines*) in the U.S. April 2003. Annual Meeting of the Kansas (Central States) Entomological Society; Manhattan, Kansas.
 The Dynamics of Dispersal: Soybean Aphid (*Aphis glycines*) Movement in the U.S. April 2003. Annual Meeting of the Kansas (Central States) Entomological Society; Manhattan, Kansas.
 GIS Modules for ET and Available Soil Water in Northwest Kansas. March 2003. Kansas Water Conference; Manhattan, Kansas.
- 2002: Geographic Applications in Nonpoint Source Pollution Assessment. October 2002. Applied Geography Conference; Binghamton, NY.
 Modified Cloud Model Approach to Estimating Active Microwave Backscatter from Vegetation in Soil Moisture Investigations. June 2002. 2002 Annual Meeting of the International Geoscience and Remote Sensing Society (IGARSS); Toronto, Ontario, Canada.
 Geographic Applications in Nonpoint Source Pollution Assessment. April 2002. Mid-America GIS Symposium; Kansas City, MO.
 Regionalizing Riparian Ecosystem Management Model (REMM) Parameters. March 2002. Annual Meeting of the Association of American Geographers; Los Angeles, CA.
- 2001: Estimating Tallgrass Prairie Soil Moisture using Active Satellite Microwave Imagery and Optical Sensor Inputs. February 2001. Annual Meeting of the Association of American Geographers; New York, NY
- 2000: The Influence of Topography on Synthetic Aperture Radar Imagery. March 2000. Annual Meeting of the Association of American Geographers; Pittsburgh, PA.
- 1999: Rural Landcover Classification using Multidate SAR Imagery. May 1999. Annual Meeting of the American Society of Photogrammetry and Remote Sensing; Portland, OR.
 Spatial Modeling of Net Radiation over Heterogenous Terrain. March 1999. Annual Meeting of the Association of American Geographers; Honolulu, HI.
- 1998: Spatial Modeling of Net Radiation over Heterogenous Terrain. October 1998. Applied Geography Conference; Louisville, KY.
 Extracting Soil Moisture Information from ERS-1 Imagery. April 1998. Annual Meeting of the Association of American Geographers; Boston, MA.
- 1997: Radar Backscatter - Soil Moisture Relationships over Tallgrass Prairie. October 1997. Applied Geography Conference; Albuquerque, NM.
 Radar Backscatter - Soil Moisture Relationships over Tallgrass Prairie. September 1997. Great Plains/Rocky Mountain Division of the Association of American Geographers; Bozeman, MT.
 Radar Backscatter - Soil Moisture Relationships over Tallgrass Prairie. April 1997. Annual Meeting of the Association of American Geographers; Fort Worth, TX.

Fellowships, Awards, and Honors

Ron Gaches Undergraduate Teaching Award (2018), College of Arts & Sciences, Kansas State University
 Sabbatical Leave, Laboratoire de Télédétection et de Gestion des Territoires, Université de Toulouse, Ecole d'Ingénieurs de Purpan, Toulouse, France (September 2009 – May 2010)
 Team Member, 2005 ESRI Special Achievement in GIS (SAG) Award for Agriculture
 New Faculty Fellow, Kansas State University (2003)
 3rd Place, 2000 AAG Remote Sensing/GIS Specialty Group Student Poster Competition
 1st Place, 1999 AAG Remote Sensing/GIS Specialty Group Student Poster Competition
 2nd Place, 1998 AAG Remote Sensing/GIS Specialty Group Student Poster Competition
 Student Travel Grant, 1998. Great Plains-Rocky Mountain Div. of the Assoc. American Geographers, \$200.
 1st Place, 1997 Applied Geography Conference Student Paper Competition
 1st Place, 1997 Great Plains/Rocky Mountain AAG Student Paper Competition
 2nd Place, 1997 AAG Remote Sensing/GIS Specialty Group Student Poster Competition
 Earth Systems Science Fellowship (3 Year Award). 1997. NASA, \$66,000.
 Department of Defense Environmental Fellowship (2 Year Award). 1995. U.S. Dept. of Defense, \$50,000.

Teaching Experience

Graduate Courses

FDSCI 703 A Multidisciplinary Overview of Food Safety and Security, Food Science Institute, Kansas State University; 2008-Present
GEOG 712 Internet GIS and Distributed GIServices, Spring 2011, Spring 2012, Spring 2014, Spring 2015, Spring 2017, Spring 2019, Spring 2020

GEOG 725 Geography of Water Resources, Department of Geography, Kansas State University; Spring 2004, Spring 2006.

GEOG 728 Topics in Programming for Geographic Analysis, Department of Geography, Kansas State University; Fall 2013, Spring 2016, Spring 2018, Fall 2019, Fall 2020

GEOG 808 Geocomputation, Department of Geography, Kansas State University; Spring 2009, Fall 2015

Undergraduate Courses

CET 250 Photogrammetry, Department of Civil and Environmental Technology, Kansas State University; Fall 2000.

DAS 195, Sustainability and You: Planet, Profits, and People, K-State First Connecting Across Topics (CAT) Community Course, Kansas State University; Fall 2014, Fall 2015 (Residential), Fall 2016, Fall 2017, Fall 2018, Fall 2019

DAS/DEN/GENAG 582 NRES Capstone Course, Natural Resources and Environmental Sciences Secondary Major, Kansas State University; Fall 2013, Spring 2014, Spring 2015, Spring 2016, Fall 2016

GEOG 220 Environmental Geography I, Department of Geography, Kansas State University; Spring 2001, Fall 2001, Spring 2002.

GEOG 302 Cartography and Thematic Mapping, Department of Geography, Kansas State University; Fall 2001, Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006, Fall 2007

GEOG 508 Geographic Information Systems I, Department of Geography, Kansas State University; Spring 2003, Spring 2004, Spring 2006, Spring 2007, Fall 2008, Fall 2010, Fall 2011, Fall 2012, Fall 2014, Fall 2016, Fall 2017, Spring 2018

GEOG 602 Computer Mapping and Geographic Visualization, Department of Geography, Kansas State University; Spring 2002, Spring 2003, Spring 2005, Spring 2007, Spring 2008, Spring 2009, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019, Fall 2019, Fall 2020

GEOG 608 Geographic Information Systems II, Department of Geography, Kansas State University; Fall 2001, Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006, Fall 2007, Fall 2008, Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Spring 2020, Spring 2021

Student Advising

Current PhD Students

Fischer, Amariah (PhD, Geography, expected 2022); Dissertation Title TBA. Co-advisor: Dr. Matthew Sanderson (Department of Sociology, Anthropology, and Social Work).

Lee, Eohjin (PhD, Geography, expected 2023); Dissertation Title TBA.

Onuoha, Hilda (PhD, Geography, expected 2021); "Long-term Analysis of Phenometrics, Trends, and Ecosystem Service Valuation for Grasslands in the Great Plains Ecoregion."

PhD Students Advised (1 Total)

Aber, Jeremy (PhD, Geography, 2012); "Comparing the Dominant and Continuous Theoretical Frameworks of Spatial Microgenesis."

Active PhD Committee Memberships

Jean, Christy (PhD, Geography) – expected 2020

Ding, Meng (PhD, Geography) – expected 2022

Gadwal, Manoj (PhD, Biol & Agric Engg) – expected 2023

Messier, Ashley (PhD, Hort/Nat Res) – expected 2023

Wan, Nenghan (PhD, Agronomy) – expected 2023

Werdel, Ty (PhD, Hort/Nat Res) – expected 2020

Past PhD Committee Memberships

Aulicky, Carly (PhD, Biology, 2020)

Aguilar, Jonathan (Ph.D., Biol & Agric Engg, 2009)

Ching'oma, Godfrey (PhD, Entomology, 2006)

Commerford, Julie (PhD, Geography, 2016)

Conard, Jonathan (PhD, Biology, 2009)

Dobbs, Mary (PhD, Geography, 2007) - Posthumous

Flock, Brian (PhD, Biology, 2007)

Ghimire, Kabita (PhD, Geography, 2016)

Kim, Ik-Jae (PhD, Biol & Agric Engg, 2006)

Koch, David (PhD, Geography, 2010)

Laingen, Chris (PhD, Geography, 2009)

Lee, Ming-chieh (PhD, Biol & Agric Engg, 2009)

Ling, Bohua (PhD, Geography, 2018)

Martinez-Kawas, Adrian (PhD, Grain Science & Industry, 2013)

McDonough, Kelsey (PhD, Biol & Agric Engg), 2018)

McNew, Lance (PhD, Biology, 2010)

Muche, Muluken (PhD, Biol & Agric Engg, 2016)

Ndiaye, Ramatoulaye (PhD, Geography, 2009)

Parajuli, Prem (PhD, Biol & Agric Engg, 2007)

Presley, DeAnn (PhD, Agronomy, 2007)

Raghavan, Ram (PhD, Diagnostic Medicine & Pathobiology, 2011)

Rahmani, Vahid (PhD, Biol & Agric Engg, 2014)

Semeao, Altair (PhD, Entomology, 2011)

Singh, Daljit (PhD, Plant Pathology, 2018)

Sparks, Adam (PhD, Plant Pathology, 2009)

Sullins, Dan (PhD, Biology, 2017)

Tavokol, Ameneh (PhD, Biol & Agric Engg, 2020)

Tinnon, Vicki (PhD, Geography, 2010)

Toros, Tulu (PhD, LARCP, 2014)

Tuppad, Pushpa (PhD, Biol & Agric Engg, 2006)

Zambreski, Zachary (PhD, Agronomy, 2020)

Outside PhD Committee Chair

Duque, Leidy Eugenia Pena (PhD, Biol & Agric Engg, 2013)
 Ha, Sang Su David (PhD, Agric Economics, expected 2021)
 Greenway, Ryan (PhD, Biology, 2019)
 Martin, Erika (PhD, Biology, 2014)
 Obembe, Oladipo (PhD, Economics, 2019)

Ofori, Francis (PhD, Statistics, 2019)
 Raudenbush, Zane (PhD, Hort, Forestry and Rec Res, 2015)
 Wibowo, Ruilanda (PhD, Agric Economics, 2016)
 Schechner, Anne (PhD, Biology, expected 2021)

Current Master's Students

None

Master's Students Advised (11 Total)

Braget, Austin (M.A., Geography, 2017); "Time Series Analysis of Phenometrics and Long-Term Vegetation Trends for the Flint Hills Ecoregion using Moderate Resolution Satellite Imagery."
 Breitreutz, Will (M.A., Geography, 2006); "Mapping Hantavirus Risk: A Reservoir Species Perspective."
 Brown, Tracy L. (M.A., Geography, 2004); "Classification of Potential Surface Water Pollution Sources in Kansas."
 Davis, Tony (M.A., Geography, 2005); "Estimating Soil Erosion Risk at Fort Riley, Kansas using the Revised Universal Soil Loss Equation (RUSLE) with a Military Training Intensity Factor."
 Dulin, Michael (M.A., Geography, 2009); "Identifying and Assessing Windbreaks in Ford County, Kansas using Object-based Image Analysis."
 Eddy, Zachary (M.A., Geography, 2011); "Efficacy of Natural Vegetative Barriers at Limiting Prairie Dog Dispersal in Logan County, Kansas"
 Fischer, Amariah (M.A. Geography, 2018); "Developing and Evaluating a Geographic Information Dashboard to Improve Spatial Task Performance."
 Pockrandt, Bryanna (M.A., Geography, 2014); "A Multi-Year Comparison of Vegetation Phenology between Military Training Lands and Native Tallgrass Prairie using TIMESAT and Moderate-Resolution Satellite Imagery."
 Stansberry, Brooke (M.A., Geography, 2005); "Landscape Factors Influencing the Presence of Migrant Forest Songbirds in the Kansas Flint Hills."
 Vought, Thomas (M.A., Geography, 2006); "Assessing the Threat of Biological Terrorism to U.S. Agriculture."
 Williams, Danielle (M.A. Geography, 2016); "Time Series Analysis of Vegetation Dynamics and Burn Scar Mapping at Smoky Hill Air National Guard Range, Kansas using Moderate Resolution Satellite Imagery."

Active Master's Committee Memberships

Garcia, Devon (M.A. Geography) – expected 2021
 Krueger, Laura (M.S., Biol & Agric Engg) – expected 2021
 Nottingham, Emily (M.S., Biol & Agric Engg) – expected 2021

Walker, Hayden (M.A. Geography) – expected 2021
 Watson, Jordan (M.A. Geography) – expected 2021

Past Master's Committee Memberships

Allen, Matthew (M.A., Geography, 2017)
 Braget, Mitchell (M.A., Geography, 2017)
 Burkitt, Jeffrey (Beau) (M.A., Geography, 2009)
 Bussen, Patrick (M.S., Biol & Agric Engg, 2009)
 Butler, Will (M.A., Geography, 2013)
 Chileen, Barrie (M.A. Geography, 2019)
 Christianson, Reid (M.S., Biol & Agric Engg, 2004)
 Commerford, Julie (M.A., Geography, 2010)
 Corkins, Chelsea (M.S., Biol & Agric Engg, 2013)
 Denker, Phillip (M.S., Biol & Agric Engg, 2013)
 Ding, Meng (M.A., Geography, 2019)
 Dobbs, Mary (M.A., Geography, 2004)
 Emerson, Lori (M.A., Geography, 2005)
 George, Jacob (M.A., Geography, 2009)
 Ghimire, Kabita (M.A., Geography, 2007)
 Graf, Nicholas (M.A., Geography, 2008)
 Handley, Katie (M.S., Biol & Agric Engg, 2011)
 Hazelton, Scott (M.S., Land Arch/Reg & Comm Plan, 2020)
 Jasti, Srinivas (M.S., Computer Science, 2004)
 Kalimuthu, Visaken (M.S., Computer Science, 2005)
 Kenne, Gabriel (M.S., Public Health, 2013)
 Kersey, Nathaniel (M.A., Land Arch/Reg & Comm Plan, 2008)

Klein, Matthew (M.A., Land Arch/Reg & Comm Plan, 2004)
 Lawrence, Bryce (M.A., Land Arch/Reg & Comm Plan, 2005)
 Lightner, Joey (M.S., Public Health, 2013)
 Ling, Bohua (M.A., Geography, 2013)
 Luo, Lei (M.A., Geography, 2016)
 Marcotte, Abbey (M.A., Geography, 2020)
 McCullough, Kelsey (M.S., Biology, 2016)
 Mong, Tony (M.S., Biology, 2005)
 Morris, Christopher (M.A., Geography, 2013)
 Oneth, Kyle (M.S., Land Arch/Reg & Comm Plan, 2020)
 Patterson, Judd (M.A., Geography, 2008)
 Peterson, Rorik (M.A., Geography, 2008)
 Pugh, Ginger (M.S., Biol & Agric Engg, 2013)
 Raghavan, Narayanan (M.S., Computer Science, 2005)
 Reker, Ryan (M.A., Geography, 2004)
 Safaee, Samira (M.A. Geography, 2017)
 Shah, Linesh (M.S., Computer Science, 2003)
 Sweet, Jason (M.A., Geography, 2006)
 Tabor, Lisa (M.A., Geography, 2011)
 Thomas, Victoria (M.S., Biol & Agric Engg, 2020)
 Walter, Blake (M.A., Geography 2018)
 Walterscheid, Steven (M.A., Geography, 2011)

Kim, Ik-Jae (M.S., Biol & Agric Engg, 2003)

Zimney, Michael (M.A., Geography, 2003)

Certificate Advising

Graduate Certificate in GIScience – 90 completed

Undergraduate Certificate in GIS – 116 completed

Highlighted Service Activities

Professional Service

Member, Regional Division Task Force, American Association of Geographers, 2019-2020.

Chair of Regional Councilors, American Association of Geographers, 2016-2017.

Regional Councilor, Great Plains/Rocky Mountain Division, American Association of Geographers; 2014-2017.

Member, Membership Committee, American Association of Geographers; 2014-2017.

Chair, Great Plains/Rocky Mountain Division, American Association of Geographers; 2013-2014.

Member, AAG Student Awards and Scholarships Committee; 2007 – 2010.

Newsletter Editor, Water Resources Specialty Group, Association of American Geographers; 2002 – 2008.

Member, Association of American Geographers International Geographic Information Fund (AAG-IGIF) Award Selection Committee (2006-2007)

State Service

State of Kansas GIS Policy Board, 2001-2009.

State of Kansas GIS Technical Advisory Committee (TAC), Agriculture and Water Resources Subcommittees; 2005-2009.

State of Kansas Nonpoint Source Pollution Control Program Advisory Committee; 2001-2008.

University Service

Director, Graduate Certificate in GIScience, Kansas State University; 2002-Present

Director, Undergraduate Certificate in GIS, Kansas State University; 2004-Present

Director, Natural Resources and Environmental Sciences Secondary Major, Kansas State University; 2015-Present

Delegate, University Consortium for Geographic Information Science; 2004-Present

Interim Director, Natural Resources and Environmental Sciences Secondary Major, Kansas State University; 2013-2014

Engineers & Scientists to the Rescue Instructor, Women in Science & Engineering Program (WESP), Kansas State University; 2005-2006

ESRI Authorized Introduction to ArcView Instructor; 2003 – 2005.

Faculty Advisor, Student Chapter of the American Society for Photogrammetry and Remote Sensing/GIS Club, Kansas State University, 2014-Present.

Girls Researching our World (GROW) Summer Workshop Instructor, Women in Science & Engineering Program (WESP), Kansas State University; 2005-Present

K-State Learning Enhancement Action/Resource Network (LEARN); 2000-2003

Member, Board of Directors for the Natural Resources and Environmental Sciences Secondary Major, 2008-Present

Member, Committee to Develop a Major in Environmental Science, 2019-Present

Member, K-State Sustainable Landscaping Committee, 2020-Present

Member, Kansas State University Udall Scholarship Review Committee, 2014-Present

Member, Kansas State University GIS Steering Committee; 2004-Present

Member, Kansas State University GIS Technical Advisory Group; 2006-Present

Member, Technology Fee Committee, College of Arts & Sciences, Kansas State University, 2013

Member, Varney Chair in Business GIS Search Committee, College of Business Administration, Kansas State University; 2008-2009

Department Service

Director, Geographic Information Systems Spatial Analysis Laboratory (GISSAL); 2002-Present

Webmaster and Social Media Coordinator; 2007-Present

Chair, Earth System Scientist/Physical Geographer Search Committee, 2015-16

Chair, Faculty Nature-Society GIS Search Committee, 2013-14

Chair, Faculty GIScience Search Committee, 2007

Member, Department Head Search Committee, 2005

Webmaster, Department of Geography; 2003-Present

Memberships in Professional Organizations

American Society for Photogrammetry and Remote Sensing (ASPRS)

American Association of Geographers (AAG)
University Consortium for Geographic Information Science (UCGIS)

Military Experience and Awards (1991-1995)

Positions and Units

Assistant Operations Officer (Captain), Engineer Brigade, 1 ID (Mech), Fort Riley, Kansas; January 1995 - August 1995.
Plans Officer (1st Lieutenant), Engineer Brigade, 1 ID (Mech), Fort Riley, Kansas; February 1994 - January 1995.
Executive Officer (1st Lieutenant), A Co., 1st Engineer Battalion, 1 ID (Mech), Fort Riley, Kansas; December 1992 - February 1994.
Platoon Leader (2nd Lieutenant), B Co., 1st Engineer Battalion, 1 ID (Mech), Fort Riley, Kansas; June 1992 - December 1992.
Platoon Leader (2nd Lieutenant), 55th Engineer Co. (MGB), 1 ID (Mech), Fort Riley, Kansas; May 1991 - June 1992.

Awards

Meritorious Service Medal
Army Achievement Medal

Army Commendation Medal
Army ROTC Four-Year Scholarship (1986-1990)