

Jeffrey C. Brunskill

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Education

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| 2005 | Ph.D., Geography, University at Buffalo, The State University of New York |
| 2001 | M.A., Geography, University at Buffalo, The State University of New York |
| 1999 | B.S., Meteorology and Marine Meteorology, North Carolina State University |

Professional Experience

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| 2011-present | Associate Professor, Department of Environmental, Geographical and Geological Sciences (EGGS) – Bloomsburg University, Bloomsburg, PA |
| 2006-2011 | Assistant Professor, Department of Environmental, Geographical and Geological Sciences (EGGS) – Bloomsburg University, Bloomsburg, PA |
| 2005-2006 | Visiting Assistant Professor, Department of Geography – Middlebury College, Middlebury, VT |
| 1999-2005 | Research Fellow, Integrative Graduate Education and Research Training (IGERT) Program in GIScience at the National Center for Geographic Information and Analysis (NCGIA) – University at Buffalo, The State University of New York, Buffalo, NY |

Research Interests

Spatial cognition of atmospheric processes and related phenomena; the communication and visualization of weather information by modern news media; representations of weather phenomena in geographic information systems (GIS); geographic education

Publications – Refereed Articles

Sinha, G., Kronenfeld, B. J., & **Brunskill, J. C.** (2015). Toward the democratization of geographic information: GIS, remote sensing, and GNSS applications in everyday life. In Prasad S. Thenkabail (Ed.), *Remotely Sensed Data: Characterization, Classification, and Accuracies*. London: CRC Press.

Brunskill, J. C., & Jones, C. (2011). The Bloomsburg Weather Viewer: A resource for integrating webcam and local weather station data into the introductory meteorology classroom. *Bulletin of the American Meteorological Society*, 92(8), 956-963.

Brunskill, J. C. (2010). Qualitative and quantitative descriptions of temperature: A study of the terminology used by local television weather forecasters to describe thermal sensation. *International Journal of Biometeorology*, 54(2), 193-209.

Wilhelmi, O. V., & **Brunskill, J. C.** (2003). Geographic information systems in weather, climate, and impacts. *Bulletin of the American Meteorological Society*, 84(10), 1409-1414.

Brunskill, J. C., & Jørgensen, C. (2002). Image attributes: A study of scientific diagrams. *Proceedings of the American Society for Information Science and Technology Annual Meeting, November 2002*, 39, 365-375.

Refereed Encyclopedia Essays

Brunskill, J. C. (2011). Volatile Organic Compounds. In Craig W. Allin (Ed.), *Encyclopedia of Environmental Issues* (pp. 1265-1266). Pasadena, CA: Salem Press.

Brunskill, J. C. (2011). Atmospheric Inversions. In Craig W. Allin (Ed.), *Encyclopedia of Environmental Issues* (pp. 113-114). Pasadena, CA: Salem Press.

Brunskill, J. C. (2010). Geographic Information Systems. In Craig W. Allin (Ed.), *Encyclopedia of Global Resources* (pp. 498-500). Pasadena, CA: Salem Press.

Brunskill, J. C. (2009). Global Dimming. In S. I. Dutch (Ed.), *Encyclopedia of Global Warming* (pp. 498-500). Pasadena, CA: Salem Press.

Other Publications

DiBiase, A., Staats, S., Gambler, T., **Brunskill, J. C.**, & Podeschi, C. (2015). Town of Bloomsburg parking study. (*Unpublished report for the Town of Bloomsburg*)

Prosceno, J., Saylor, B., Kachur, K., Robinson, L., Jenkins, A., **Brunskill, J. C.**, & Mathews, C. (2011). Using geographic information system technologies and i-Tree to conduct a street tree inventory: Enhancing the canopy. *Pennsylvania Borough News: The Official Magazine of the Pennsylvania State Association of Boroughs*, 4(7), 36-39.

Bliss, A., Mikucki, B., **Brunskill, J. C.**, & Longwell, Jr., G. (2010). Onlot analysis: A GIS analysis of the distribution and transportation of septage produced by homeowners in Columbia County. *Pennsylvania Borough News: The Official Magazine of the Pennsylvania State Association of Boroughs*, 3(10), 36-39.

Kehoe-Forutan, S. J., Wymer, D., & **Brunskill, J. C.** (2009). McHenry Cemetery: The joining of necrogeographical and anthropological studies. (*Unpublished report for the McHenry Cemetery Board*)

Brunskill, J. C. & Badurek, C. (2004). *Snowboarding in New York State: A GIS case study*. Retrieved from the University at Buffalo, National Center for Case Study Teaching in Science case collection web site:
http://www.sciencecases.org/snowboard/snowboard_notes.asp.

Grants

- 2012** Greene, N. (Co-PI), Holtzman, J. (Co-PI), Wolfe, J. (Participant), Moyer, J. (Participant), & Brunskill, J. C. (Participant). **Presidential Strategic Initiative Grant**. *Campus-wide energy monitoring and efficiency initiative*, \$25,000.
- 2011** Greene, N. (Co-PI), Brunskill, J. C. (Co-PI), Jones, C. (Participant), Coles, D. (Participant), Doll, H. (Participant), Ibrahim, G. (Participant), & Bankes, R. (Participant). **Constellation Energy – Energy to Educate Grant**. *Bloomsburg University campus energy monitoring kiosk*. \$39,900.
- 2011** Brunskill, J. C. (Co-PI), Greene, N. (Co-PI), Huckans, J. (Participant), Kehoe-Forutan, S. (Participant), Jones, C. (Participant), Hintz, J. (Participant), Bankes, R. (Participant), & Wolfe, J. (Participant). **Bloomsburg University Foundation Margin of Excellence Grant**. *Bloomsburg University photovoltaic solar array and educational demonstration site*. \$10,000.
- 2011** Greene, N. (Co-PI), Brunskill, J. C. (Co-PI), Huckans, J. (Participant), Kehoe-Forutan, S. (Participant), Jones, C. (Participant), Hintz, J. (Participant), Bankes, R. (Participant), & Wolfe, J. (Participant). **Presidential Strategic Initiative Grant**. *Bloomsburg University photovoltaic solar array and educational demonstration site*. \$5,000.
- 2010** Jones, C. (Co-PI), & Brunskill, J. C. (Co-PI). **Bloomsburg University Grants for Research and Disciplinary Projects**. *Bloomsburg weather viewer*. \$9,873.
- 2010** Matthews, C. (Co-PI), & Brunskill, J. C. (Co-PI). **Pennsylvania Community Forests Municipal Challenge Grant**. *Town of Bloomsburg and Bloomsburg University tree inventory project, Summer 2010*. \$5,000.
- 2010** Brunskill, J. C. (Co-PI), & Trifonoff, K. T. (Co-PI). **Bloomsburg University TALE Teacher-Scholar Awards**. *Improving navigation skills through the use of compasses and pedometers*. \$1,155.
- 2009** Venn, C. (PI), Hranitz, J. (Participant), Brunskill, J. C. (Participant), & Shepard, M. (Participant). **Pennsylvania State System of Higher Education Faculty Professional Development Grant**. *A pilot interdisciplinary investigation of salt marsh wetlands at Wallops Island, VA*. \$4,424.
- 2008** Haffner, C. (PI), & Brunskill, J. C. (Participant). **Foundation for Pennsylvania Watersheds Workshop Grant**. *Bloomsburg University Applied GIS Workshop for watershed specialists – summer 2008*. \$2,000.
- 2008** Brunskill, J. C. (PI). **Sun Microsystems Academic Excellence Grant (AEG)**. *Developing online resources to enhance weather observation in the classroom*. \$59,087.
- 2007** Wood, M. (PI), Brunskill, J. C. (Participant), and Trifonoff, K. T. (Participant). **Bloomsburg University Grants for Research and Disciplinary Projects**. *Chipmunks and squirrels in suburbia: An interdisciplinary approach*. \$1,338.

- 2006** Brunskill, J. C. (PI), Doll, H. (Participant), Phillips, T. (Participant), and Jones, C. (Participant). **Bloomsburg University Foundation Margin of Excellence Grant.** *Developing online resources to enhance weather observation in the classroom.* **\$2,253.**
- 2002** **National Center for Atmospheric Research (NCAR) Student Travel Grant.** *GIS in weather, climate and impacts workshop at the National Center for Atmospheric Research (NCAR), Boulder, CO.*
- 2000** Brunskill, J. C. (PI). **University at Buffalo Mark Diamond Research Fund Master's Thesis Enhancement Grant (Grant # F-3-2000).** *Scale distinctions in meteorological maps: A study of meteorological reference frames.* **\$325.**

Awards

- 2013** Bloomsburg University Reassigned Time Award. *Bloomsburg University Solar Kiosk.* One course workload reduction for spring semester 2013.
- 2011** Provost Award for Research and Scholarship
- 2010** Bloomsburg University Reassigned Time Award. *Using the Bloomsburg University Weather Viewer to enhance introductory meteorology coursework.* One course workload reduction for spring semester 2010.
- 2001** Second Place Award: New England Chapter of the American Society for Information Science and Technology (NEASIST) Student Paper Competition.

Presentations at Professional Meetings

- 2014** DiBiase, A., Brunskill, J. C., Podeschi, C., Gambler, T., and Staats, S. *A Geographical and Sociological Study of Parking Patterns in Bloomsburg, PA.* Presented at the Annual Meeting of the Pennsylvania Geographical Society, State College, PA, November 6, 2014.
- 2014** DiBiase, A., Staats, S., Brunskill, J. C., Podeschi, C. *A Geographical and Sociological Study of Parking Patterns in Bloomsburg, PA.* Presented at the Pennsylvania GIS Conference, June 20-21, State College, PA.
- 2014** Brunskill, J. C., Jones, C. *Bloomsburg Weather Viewer: A Visualization Software Program for Teaching Introductory Weather Concepts.* Presented at the 2014 Annual Meeting of the Association of American Geographers, Tampa, FL, April 8-12, 2014.
- 2014** Capozzoli, J., Jones, C., Brunskill, J. C., and Greene, N. *The Design and Implementation of an Educational Solar Energy Kiosk at Bloomsburg University.* Presented at the 2014 Annual Meeting of the Association of American Geographers, Tampa, FL, April 8-12, 2014.
- 2013** Brunskill, J. C. *The Influence of Storm Frequency on Regional Media Descriptions of Hurricanes.* Presented at the 2013 Annual Meeting of the Association of American Geographers, Los Angeles, CA, April 9-13, 2014.

- 2012** Brunskill, J. C. *GIS-Based street tree inventories: A review of an ongoing Bloomsburg University community service project*. Presented at the Bucknell GIS Conference – GIS and Spatial Thinking in the Undergraduate Curriculum, Bucknell, PA, November 16-18, 2012.
- 2011** Venn, C., Hranitz, J. M., Shepard, M. K., Brunskill, J. C., and Culp, B. M. *A Model for Integrating Undergraduate Research Into Course Content Across Disciplines: Salt Marsh Mapping as a Focus for Courses in Remote Sensing, GIS, Field Zoology, Marine Ecology and Wetlands Ecology*. Presented at the 21st Biennial Conference of the Coastal and Estuarine Research Federation, Dayton Beach, FL, November 6-10, 2011.
- 2011** Brunskill, J. C., and Mathews, C. *Using GPS, GIS and iTree to Inventory Bloomsburg's Street Trees*. Presented at the 2011 Northeastern Pennsylvania Tree Association Community forestry Workshop, Bloomsburg, PA, August 19, 2011.
- 2011** Brunskill, J. C., and Prosceno, J. *The Town of Bloomsburg Street Tree Inventory*. Presented at the Pennsylvania GIS Conference 2011: Enhancing Our Digital Infrastructure, Grantville, PA, May 23-26, 2011.
- 2011** Venn, C., Culp, B. M., Brunskill, J. C., and Shepard, M. K. *A Technique for Monitoring Salt Marsh Subhabitats: Integration of Quickbird Satellite Imagery with GIS to Map Subzones in a Virginia Salt Marsh*. Presented at the 2011 Northeastern and North-Central Joint Meeting of the Geological Society of America, Pittsburgh, PA, March 20-22, 2011.
- 2011** Venn, C., Culp, B. M., Huot, D. A., Shepard, M. K., and Brunskill, J. C. *Remote Sensing and Geographic Information Science as Tools to Track Salt Marsh Changes in Wallops Island, VA*. Presented at the 2011 ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, February 13-18, 2011.
- 2011** Brunskill, J.C., and Jones, C. *The Bloomsburg Weather Viewer: A Resource for Integrating Webcam and Local Weather Station Data into the Introductory Meteorology Classroom*. Presented at the 2010 Annual Meeting of the American Meteorological Society, Seattle, WA, January 23-27, 2011. (**Note:** The paper accepted and published online, but the presentation was cancelled due to illness.)
- 2010** Brunskill, J. C., and Jones, C. *Assessing Current and Proposed Methodologies for Teaching Meteorology and Environmental Science with Technology*. Presented at the Lilly Conference on College and University Teaching, Washington, D.C., June 3-5, 2010. (Poster Presentation)
- 2010** Brunskill, J. C., and Jones, C. *Using the Bloomsburg University Weather Viewer to Enhance Student Comprehension of Introductory Weather Concepts*. Presented at the Annual Meeting of the Association of American Geographers. Washington, D.C., April 14-18, 2010.

- 2010** Armstrong, T., Huot, D., Brunskill, J. C., and Venn, C. *Creating Vegetation Maps of Salt Marsh Vegetation Zones near Wallops Island, VA, Using Field Survey Data and a GIS Approach*. Presented at the Northeastern and Southeastern Joint Meeting of the Geological Society of America. Baltimore, MD, March 13-16, 2010. (Poster Presentation)
- 2010** Venn, C., Brunskill, J. C., and Hranitz, J. *Can Microenvironments in Low and High Marsh Areas of Mid-Atlantic Coast Salt Marshes be Quantified by Remote Sensing and Used to Assess Changes in Salt Marsh Habitat Over Time?* Presented at the 2010 Ocean Sciences Meeting. Portland, OR, February 22-26, 2010. (Poster Presentation)
- 2010** Venn, C., Hranitz, J., and Brunskill, J. C. *An Interdisciplinary Project across Disciplines in Undergraduate Education: Salt Marsh Vegetation, Distribution of Salt Marsh Invertebrates, and the Application of Geographic Information Science*. Presented at the Society for Integrative and Comparative Biology 2010 Annual Meeting. Seattle, WA, January 3-7, 2010. (Poster Presentation)
- 2009** Bliss, A., Mikucki, B., and Brunskill, J. C. *A GIS Based Estimate of On-Lot Septage Produced by Residential Homeowners in Central Pennsylvania*. Presented at the 2009 Pennsylvania GIS Conference. Grantville, PA, May 19-20, 2009.
- 2009** Brunskill, J. C. *A Comparison of the Qualitative and Quantitative Descriptions That Local Television Weather Forecasters Use to Describe Temperature*. Presented at the Association of American Geographers Annual Meeting. Las Vegas, NV, March 22-27, 2009.
- 2008** Brunskill, J. C. *Is the Weather Here Normally Like This? – A Study of Geographic Variability Associated with the Use of Everyday Weather Terms*. Presented at the Association of American Geographers Annual Meeting. Boston, MA, April 15-19, 2008.
- 2007** Hoogendoorn, A., Brunskill, J. C., and Kehoe-Forutan, S. *A Study of Spatial and Temporal Anomalies Associated with the Placement of Gravestones at McHenry Cemetery in Orangeville, Pennsylvania*. Presented at the Middle States Division of the Association of American Geographers Annual Meeting. Reading, PA, November 7-8, 2007. (Poster Presentation)
- 2007** Brunskill, J. C. *Incorporating Weather Observation Equipment into Introductory Geography Coursework*. Presented at the Association of American Geographers Annual Meeting. San Francisco, CA, April 17-21, 2007.
- 2006** Brunskill, J. C. *Different Perspectives on Weather Knowledge*. Presented at the Association of American Geographers Annual Meeting. Chicago, IL, March 7-11, 2006.
- 2005** Brunskill, J. C. *Experientially Defined Weather Concepts*. Presented at the Association of American Geographers Annual Meeting. Denver, CO, April 5-9, 2005.
- 2004** Brunskill, J. C. *Spatial Properties of Atmospheric Models Derived from Narratives*. Presented at the Association of American Geographers Annual Meeting. Philadelphia, PA, March 2004.

- 2003** Brunskill, J. C. *Conceptual Models of Atmospheric Space: A Study of Experiential Knowledge in Folk and Scientific Representations of the Atmosphere*, Presented in the Doctoral Colloquium Session at the Conference on Spatial Information Theory (COSIT). Ittingen, Switzerland, September 2003.
- 2003** Brunskill, J. C., and Badurek, C. *Using GIS with a Course Management System for a Case-Study Approach to Teaching Map Use and Analysis*, Conference on Instructional Technologies. Potsdam, NY, May 2003.
- 2003** Brunskill, J. C. *Using GIS to Determine Line-of-Sight in Variable Terrain*. Presented at Visual Communication and Social Change: Rhetorics and Technologies. Rochester, NY, April 2003.
- 2003** Brunskill, J. C. *Integrating GIS into the Atmospheric Sciences*. Presented at the Association of American Geographers Annual Meeting. New Orleans, LA, March 2003.
- 2002** Brunskill, J. C., and Jörgensen, C. *Image Attributes: A Study of Scientific Diagrams*. Presented at the American Society for Information Science and Technology Annual Meeting. Philadelphia, PA, November 2002.
- 2002** Brunskill, J. C. *Boundaries in Atmospheric Space*. Presented at the GIS in Weather, Climate and Impacts Workshop. Boulder, CO, August 2002. (Poster Presentation)
- 2002** Brunskill, J. C. *Geographic Categories: A Study of Atmospheric Space*. Presented at the Association of American Geographers Annual Meeting. Los Angeles, CA, March 2002. (Poster Presentation)
- 2001** Brunskill, J. C. *Scale Distinctions in Meteorological Maps: A Study of Meteorological Reference Frames*. Presented at the Association of American Geographers Annual Meeting. New York, NY, March 2001.

Workshops / Seminars Organized

- 2016** Introduction to GIS for Conservation Districts, January 11, 2016 (*Workshop organizer/presenter*)
- 2012** Natural Gas Extraction in the Marcellus Shale Seminar Series, March 20-29, 2012. (*Seminar co-chair/organizer*)
- 2009** National Teach-In on Global Warming: Solutions for the First 100 Days at Bloomsburg University, February 5, 2009. (*Workshop organizer/presenter*)
- 2008** Bloomsburg University Applied GIS Workshop for Watershed Specialists, July 8-10, 2008. (*Workshop organizer/presenter*)
- 2007** Bloomsburg University Summer 2007 GIS Workshop – July 13th & 14th (*Workshop organizer/presenter*)

Teaching Experience

Courses Taught at Bloomsburg University of Pennsylvania

- EGGS 101: World Physical Geography
- EGGS 160: Geography and Information Systems
- EGGS 242: Map Use and Analysis
- EGGS 255: Meteorology
- EGGS 360: Principles of GIS I
- EGGS 361: Principles of GIS II

Courses Taught at Middlebury College

- GEOG 0340: Explanation in Geography
- GEOG 0320: Introduction to Geographic Information Systems
- GEOG 0253: Introduction to Synoptic Meteorology

Courses Taught at the University at Buffalo, State University of New York

- GEO 101: Physical Environmental Geography
- GEO 120: Maps and Mapping
- GEO 141: Introduction to Meteorology
- GEO 481/506: Introduction to Geographic Information Systems

Professional Service

Academic Service:

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| 2010 | Invited manuscript review completed for <i>The International Journal of Biometeorology</i> |
| 2010 | Grant review completed for the PASSHE <i>Faculty Professional Development Council Annual Grants Program</i> . |
| 2008 | Invited manuscript review completed for <i>The Professional Geographer</i> |
| 2006 | Invited manuscript review completed for <i>The National Center for Case Study Teaching in Science</i> |

University / College of Science and Technology (COST) Service:

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| 2010-present | COST Communications Committee (Committee Chair) |
| 2009-present | Social Justice and Sustainability Living and Learning Community Faculty Advisor, Bloomsburg University Forum Representative |
| 2008-present | Bloomsburg University SOLVE Board Member, Campus Green Initiative Committee (Committee Co-Chair since fall 2010); Susquehanna Valley Field School Board Member |

2006-2009 Teaching and Learning Enhancement (TALE) Committee

Department Service:

2010-present Temporary Faculty Search Committee

2009 Geography and Planning Society (Co-Advisor), Faculty Search Committee – Structural / Mineralogy, Faculty Search Committee – Groundwater / Geomorphology

2006-present Geography Curriculum Committee, Geosciences Curriculum Committee, Sabbatical Committee, Technology Committee

Membership in Professional Organizations

2008-present National Council for Geographic Education (NCGE)

2007-present American Meteorological Society

2001-present Association of American Geographers