



Jessie Braden

Director, Pratt Institute Spatial Analysis and Visualization Initiative
savi@pratt.edu, 718-399-4414

Education

Master of Arts, Geography and Planning

University of Toledo, Toledo, Ohio 1999

Thesis: The Applicability of Smooth Pycnophylactic Interpolation to Mapping Tornado Hazard Risk

Bachelor of Arts, Geography and Planning University of Toledo, Toledo, Ohio 1997
Magna Cum Laude

Academic Experience

Director 2013-present	<p>Pratt Institute Spatial and Analysis and Visualization Initiative, Brooklyn Co-founded SAVI and manage all operations and development. This GIS-centered endeavor is a multi-disciplinary research lab and service center for Pratt students, faculty, visiting researchers and civic partners. SAVI focuses on using geospatial analysis and data visualization to understand urban communities and empower community-based organizations by democratizing access to information and planning tools. Responsibilities include fundraising, partnership development, technical assistance to Pratt students and faculty, GIS analysis and data visualization, and daily operations.</p>
Program Coordinator 2014-present	<p>Pratt Institute GIS and Design Certificate Program, Brooklyn Founded and coordinate a non-credit certificate program through Pratt School of Continuing and Professional Studies. The modernized GIS program teaches students both traditional, robust analytical software along with the latest interactive tools and coding skills. This, along with a heavy emphasis on design, enables students to make compelling, data-driven maps and visualizations to solve real-world problems. Responsibilities include developing curriculum, recruiting and advising students, recruiting and hiring instructors, and managing all daily operations.</p>
Visiting Associate Professor 2016-present	<p>Pratt Institute, Brooklyn Teach "Introduction to Geographic Information Systems" in the Graduate School of Architecture, Sustainable Environmental Systems program.</p>
Adjunct Assistant Professor 2010-2016	<p>Columbia University, New York Teach "Introduction to Geographic Information Systems" in the Graduate School of Architecture, Planning, and Preservation. In past semesters advised thesis students on data analysis methodologies and advised students in the Data Analytics concentration.</p>

Professional Experience

Visualization Consultant 2013	<p>Department of the Interior, Washington D.C. Provided data visualization for the Strategic Sciences Group, Operational Group Sandy (SSG OGS) in response to Hurricane Sandy. Responsible for real-time charting and graphing of disaster consequences during a four-day scientist gathering. Assisted the Lead Advisor to the head of the National Parks Service on presentation and report design to share findings with federal agencies, local governments and policy makers.</p>
GIS Analyst/ Environmental Planner 2010-2013	<p>Pratt Center for Community Development, New York Provided community outreach, technical assistance services, materials design, and report writing and design for sustainability planning projects. Utilized GIS to deliver high-quality data collection, data analysis, and graphic illustration of data with a focus on environmental data and analysis. Researched and made recommendations on acquisition of secondary data resources, software and hardware to support community planning. Supervised and trained graduate planning fellows as well as training staff members in GIS/data analysis.</p>

GIS Manager 2006-2010	New York City Department of Parks and Recreation, Division of Central Forestry & Horticulture Managed GIS operations for the Division of Central Forestry & Horticulture. This included working directly with agency managers, cooperating researchers and outside institutions on research projects, data dissemination, and data sharing. Also oversaw and scheduled project work for GIS staff. Performed in-depth research and GIS analysis in the field of urban forestry/environmental management, including GPS data collection. Assembled narrative materials, presentation quality maps, and completed FGDC compliant metadata.
GIS/Remote Sensing Analyst 1999-2005	Futurity, Inc., Chicago Designed analysis strategies by assessing the potential of available datasets and determining how GIS and remote sensing could be used for conservation planning. This often required planning and monitoring data needs, methodology development, and summarizing analysis strategies. Completed GIS and remote sensing analyses; developed, tested, implemented and documented mapping procedures; completed statistical assessments; assessed options for presenting information; prepared final map documents and FGDC compliant metadata.

Affiliations

2013-2015	Board of Directors, GIS and Mapping Operations (GISMO)
2011-2014	Steering Committee, New York City ArcGIS User Group (NYCArc)

Software

GIS	ArcGIS, QGIS, CARTO, MapBox
Statistics	SPSS, R
Programming	HTML, CSS
Other	Adobe Creative Suite, SmartDraw, Tableau

Publications

- Lynnette Widder, Joy Ko, Jessie Braden, and Kyle Steinfeld. 2016. Spatial Behaviors of Individuals in Cities: Case Studies in Data Tracking and Scaling. In *Proceedings of the Second International Conference on IoT in Urban Space* (Urb-IoT '16). ACM, New York, NY, USA, 98-101. DOI: <http://dx.doi.org/10.1145/2962735.2962755>
- Rae, Ruth A., Gabriel Simon, and Jessie Braden. 2010. *Public Reactions to New Street Tree Planting* Cities and the Environment. Volume 3, Issue 1.
- Lu, Jacqueline W.T., Erika S. Svendsen, Lindsay K. Campbell, Jennifer Greenfeld, Jessie Braden, Kristen L. King, and Nancy Falxa-Raymond. 2010. *Biological, Social, and Urban Design Factors Affecting Young Street Tree Mortality in New York City*. Cities and the Environment. Volume 3, Issue 1.
- Braden, Jessie and Kasey Allen. *Asian Longhorned Beetle Infestation Density* (map). In: Chaix, J. Kim (editor). "Invaders at the Gate," Nature New York, The Nature Conservancy Spring/Summer 2007: page 5.
- Bier, David C. and Jessica M. Braden. 2006. *Remote Sensing and Satellite Image Classification*, in American Planning Association (Ed.), Planning and Urban Design Standards (pp. 538-239). Hoboken, NJ: Wiley.

Presentations and Invited Talks

November 2017	Pratt Manhattan Gallery panel event. <i>Art, Information and Mapping</i> (moderator).
October 2017	North American Cartographic Society Annual Meeting. <i>Putting Design at the Forefront of GIS Education</i> .
June 2017	ISIE and ISSST Joint conference on Science in Support of Sustainable and Resilient Communities. <i>Studies on Eating, Walking and Trashing in the City</i> With research collaborators Lynnette Widder (Columbia University) and Joy Koy (Rhode Island School of Design).

April 2017	Opening the Bin Workshop: New Perspectives on Waste, Culture and Society. <i>Studies on Eating, Moving and Wasting in New York City</i> . With research collaborators Lynnette Widder (Columbia University) and Joy Koy (Rhode Island School of Design).
March 2017	APA New York Metro SRC Big Data, Urban Data. <i>GIS in the New Data World</i> .
October 2016	GISMO, Map Mosaic: From Queens to the World, GISMO Exhibit and Forum. <i>Storytelling with Maps and Design</i> .
September 2016	AIA New York Design Conference. Panel: <i>People-Centric Built Environment: A Collaboration of Architecture and Social Science</i> . Presentation: <i>Data for Architecture: Changing Applications</i> .
May 2016	New York City Parks without Borders Summit. <i>Community Data Needs and Challenges</i> .
May 2016	GeoNYC. <i>Friends and Neighbors: Mapping pollution in Greenpoint and Williamsburg</i> .
March 2016	NYC School of Data, Citizen Science Session. <i>Community uses of Open Data</i> .
September 2015	Design Modelling Symposium Copenhagen 2015. Master class workshop: <i>Large-scale Data Flows<->Small-scale Human Behaviors, Tracking and Modelling Urban Data and Flows</i> . With research collaborators Lynnette Widder (Columbia University), Joy Koy (Rhode Island School of Design), Kyle Steinfeld (University of California at Berkeley).
June 2015	Microsoft Civic Tech in the Classroom. <i>Teaching Mapping, GIS and Data Analysis at Pratt</i> .
June 2015	NYU Data Services Summit. <i>Teaching the Teachers: Approaches for Providing GIS, Data and Visualization Support to Higher Ed Students and Faculty</i> .
April 2015	Omidyar Ignite. <i>Open Data Perils: Question Everything</i> .
April 2014	Brooklyn Tech Triangle U. <i>Pratt Institute Spatial Analysis and Visualization Initiative</i> .
November 2013	LocationTech. <i>MapPLUTO: From Dwarf Planet to NYC Dataset</i> .
August 2013	BetaNYC. <i>MapPLUTO: It's Out There</i> .
February 2012	Association of American Geographers Annual Meeting. <i>Two Decades of Change in New York City Greenspace</i> . With research collaborators Christopher Small (Columbia University) and Jacqueline Lu (NYC Dept. of Parks and Recreation).
February 2012	Association of American Geographers Annual Meeting. <i>Mapping and Exploration of Spatiotemporal Vegetation Change and Urban Environmental Stewardship in New York City (1990-2010)</i> . With research collaborators Christopher Small (Columbia University) and Jacqueline Lu, Kristen King, and Dexter Locke (NYC Dept. of Parks and Recreation).
June 2010	NYC Arc User Group Symposium. <i>Young Street Tree Mortality</i> .
March 2010	MillionTreesNYC, Green Infrastructure, and Urban Ecology: A Research Symposium. <i>Public Reactions to New Street Tree Planting</i> . With research collaborators Ruth Rae and Gabriel Simon (NYC Dept. of Parks and Recreation).

Awards

2015 NAG Hero Award

SAVI received Neighbors Allied for Good Growth's hero award for their work on creating NAG's ToxiCity map.

2008 New York State GIS Coordination Program Partnership Award

New York City's Urban Forest Program. A GIS partnership between New York City Department of Parks & Recreation, the U.S. Forest Service Northern Research Station, and the University of Vermont through the New York City Urban Field Station, a joint initiative of the US Forest Service and New York City Parks.