

REBEKAH JONES

Long-form Curriculum Vitae

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EDUCATION:

Ph.D Florida State University; Tallahassee, Fla. Ph.D. Geography. 2016- 2018, *Dissertation working title: Using Native American SITESCAPES to Extend the North American Paleotempestological Record.*

M.S. Louisiana State University; Baton Rouge, La. M.S. Geography, Mass Communication. May 2014. *Thesis title: Quantifying the Impact of Hurricanes, Mid-Latitude Cyclones and Other Weather and Climate Extreme Events on the Mississippi-Alabama Barrier Islands Using Remotely Sensed Data*

B.A. Syracuse University; Syracuse, New York. B.A. Geography, Newspaper and Online Journalism. *Cum Laude.* August 2012. *Focus points: Environmental and Political Journalism, Remote Sensing, and Natural Hazards.*

EXPERIENCE:

Florida Department of Health, *Division of Disease Control and Health Protection, Bureau of Emergency Preparedness and Response, Bureau of Environmental Health*, Tallahassee, Fla.

August 2019 -- Present: **SES GIS Manager**

- Department lead for emergency planning and response in geospatial science and systems, including hurricane response, epidemiological surveillance and response (COVID19, Influenza, Hepatitis A, HIV/AIDS), environmental health (water quality, toxic algae, Vibrio, Red Tide, well surveillance, more).
- Supervisor of systems, contracts, purchasing, software, development, and resources for more than 300 direct employees across the State, including all offices and bureaus within the Department of a Health.
- Manager for all GIS systems and servers, including SQL Server, GIS application development, field surveying, and related systems and integrated platforms.
- Supervising, managing and mentoring GIS staff, including project management, budgeting, hiring, meetings and coordination across departments and agencies, training and conferences, both presenting and leading/ teaching.
- Online systems manager for ArcGIS Online, Portal, and Enterprise systems, including managing user licenses, data and content, publication, and open data development.

September 2018 - August 2019: **Geospatial Analyst**

- Database management, design and deployment through SQL Server
- Geospatial application design and management through ArcGIS Online application builder, including story maps, dashboards, surveillance and monitoring systems, and public information tools.
- Surveying development (design, analysis and implementation through Survey123)
- Management of State of Florida geospatial planning and operations during emergency/disaster events for the Florida Department of Health, including response to Hurricane Michael (2018) and Hurricane Dorian (2019)
- Epidemiological research and analysis, specifically disease migration, control and outbreak mitigation and analysis for Hepatitis A (2019--), Influenza (2018, 2019), and environmental toxins (Vibrio, toxic algae, Red Tide)

Florida State University, Department of Geography, Tallahassee, Fla.

2016—2017: Instructor, Ph.D. Candidate

- GEO 2200; Physical Geography (Fall 2016 – Teaching Assistant)
- GIS 3015; Map Analysis (Spring 2017 – Instructor)
- GEO 2200; Physical Geography (Summer 2017 – Instructor)
- GIS 3015; Map Analysis (Fall 2017 – Instructor)
- GEO 4251: Climate Change and Storms (Spring 2018 – Instructor)

Louisiana Sea Grant, Louisiana State University, Baton Rouge, La.

2015—2016: Geospatial Specialist

- Development of a hurricane surge and inundation model using historical hurricane and meteorological data, and local narratives providing relative estimates of inundation (TEK), presenting the findings to community members and incorporating their qualitative data into the surge/inundation model by adjusting spatial weights of base layers.
- Identification of American Indian burial and ceremonial sites using Lidar-derived DEMs, coupled with other surface-level indicators, to assist with the tribe's application for federal recognition and expansion of their documented cultural history, as well as for designation as historical places and subsequent protections from potentially destructive development.
- Analysis and mapping of coastal oil, gas, and sulfur canals and networks, coupled with land loss data, to determine areas where land loss could be attributed to canal construction, and how those areas may respond to sea level rise in the future. General geoscience research, mapping and app development relating to land use/land cover change, land loss, hurricanes, flooding, habitat suitability, climate change, water issues, and other miscellaneous geospatial tasks upon request.
- Traditional Ecological Knowledge (TEK) project with coastal indigenous communities for the purposes of community planning for future scenarios in a warmed world.
 - Project included:
 - Regular field work for GPS-data collection
 - Outreach with tribal community
 - Collection and digitization of TEK
 - Assemblage and analysis of traditional geospatial data in consortium with tribal TEK
 - Mapping key concerns and perceived vulnerability, sustainability and adaptability features
 - Analysis of sea level rise and hurricane storm surge impacts
 - Dissemination of resulting analysis and information via traditional posters and maps, an inter- active and integrated set of online mapping applications, including story maps, crowd-sourced media guides, and scenario viewers.

Louisiana Coastal Protection and Restoration Authority, State of Louisiana; Baton Rouge, La.

2014-2015: Coastal Resources Scientist

- Developed the physical exposure model as part of a coast-wide storm surge vulnerability index using historical surge observation and interpolated rasters, used as part of a larger

- social vulnerability analysis conducted by LSU in partnership with CPRA.
- Researched and tested the sensitivity of geospatial models for various climate change scenario impacts, including tropical cyclone intensity and frequency, sea level rise, and precipitation frequency and intensity.
 - Modeled multiple sea level rise scenarios for strategic planning and feasibility studies, including shoreline change and marsh-edge erosion with proposed project assessments.
 - Authored appendices for the 2017 Coastal Master plan, including tropical cyclones, climate change, and future environmental scenarios.

Louisiana State University, Southern Climate Impacts Planning Program, Southern Regional Climate Center, Baton Rouge, La.

2012-2014: Graduate Assistant

- Reviewed and edited four chapters of the National Climate Assessment under the supervision of convening lead author Lynne Carter.
- Conducted shoreline change analysis for the Mississippi coast from 1972-2014, including hurricane impacts assessment, and storm parameters analysis.
- Completed regional climatological analysis prepared for the Louisiana Hazards Mitigation Plan, including trends and projections for future environmental conditions.
- Wrote, designed and edited publications relating to climate change and adaptation for a variety of audiences and stakeholders, ranging from government officials to non-English speaking public.

ImageCat, Inc. Long Beach, Ca.

2012-2013: Remote Sensing Analyst

- Assessed wind damage, inundation, and storm surge caused by Hurricane Sandy across the mid-Atlantic and northeast coasts using remotely sensed data. Assignments included marking buildings, determining flood height, and verification of grids.
- Trained graduate students on using the web interface and protocol for determining surge/flood heights.
- Repeated similar analysis of damaged/destroyed buildings in and around Moore, Oklahoma as a result of tornado damages in April 2013.

Syracuse Center of Excellence in Energy and Environmental Systems; *Syracuse University*, Syracuse, New York.

2011: Communications and Special Projects Intern

- Analysis using ArcGIS for profiling the distribution of sustainable initiatives and developing an action plan to evenly allocate resources within the city.
- Wrote, edited and designed publications for the EPA, USDA, City of Syracuse, Onondaga County, US Department of Energy, NY Department of Environmental Conservation, and other local non-profit organizations.
- Edited letters from our organization to Governor John de Jongh (U.S. Virgin Islands), facilitated workshops on health issues relating to hydrofracking, and spent a week collecting data and personal stories from those affected by natural gas drilling.
- Directed, edited and produced videos with the Onondaga Earth Corps, an inner-city

- youth program focused on environmental issues.
- Assisted with public outreach and education as part of Onondaga County’s “Save the Rain” program, which included website development, designing/editing informational publications and attending rain-barrel installation workshops.
- Videos:
 - <http://www.youtube.com/watch?v=N0HaP1wqbNc&noredirect=1>
 - <http://www.youtube.com/watch?v=b5Avhlf3vEQ>

PRODUCTS

1. Jones, R. and Hinson, W.P. 2019 Florida Department of Health’s Hurricane Michael GIS Response. San Diego, California: ESRI User Conference 2019.
2. Jones, R. 2014. 2017 Coastal Master Plan: Model Improvement Plan, (Subtask 4.7) Future Scenarios Appendix 7: Tropical Cyclone Intensity and Frequency. Version I. (pp. xx-xx or p. x). Baton Rouge, Louisiana: Coastal Protection and Restoration Authority. *Final version to be published in 2017.*
3. Jones, R. 2014. “Quantifying extreme weather event impacts on the northern Gulf Coast using Landsat Imagery.” Journal of Coastal Research. July 2014. DOI: <http://dx.doi.org/10.2112/JCOASTRES-D1400065.1>
4. Jones, R. 2014. “Quantifying the impact of hurricanes, thunderstorms and mid-latitude cyclones on the Mississippi-Alabama barrier islands using remotely sensed data.” MS thesis Louisiana State University. Web. April 17, 2014.
5. Friedland, C., Joyner, T., Mecholsky, K., Rohli, R., Gilliland, J., Madani, S., Ogea, S., Carter, M., and Jones, R. 2014. “Louisiana State Hazard Mitigation Plan (SHMP).” Governor’s Office, Homeland Security and Emergency Preparedness. Baton Rouge, LA.
6. Jones, R. 2013. “Crisis communication plan for the Southern Climate Impacts Planning Program and Southern Regional Climate Center” Internal Document. Web. December 2013.
7. Jones, R. 2013. “Louisiana Climate Change,” “Mississippi Climate Change,” “Oklahoma Climate Change,” “Arkansas Climate Change,” “Tennessee Climate Change,” and “Texas Climate Change.” Researcher, writer, and designer. Southern Climate Impacts Planning Program. SouthernClimate.Org. Web.

CERTIFICATIONS

- HAZUS: Using Geospatial Technologies to Describe and Measure Risks and Vulnerabilities from Florida Hurricanes, Florida Department of Emergency Management, Tallahassee, Fla. (April-May 2019)
- HAZUS: Moving Beyond Traditional Hazard Risk Analysis, Florida Department of Emergency Management, Tallahassee, Fla. (April 2019)
- HAZUS: Modeling Risk with Hazus-MH: Fundamentals and Beyond, Florida Department of Emergency Management, Tallahassee, Fla. (April 2019)
- American Meteorological Society Short Course on Storm Surge Modeling, New Orleans (Jan. 2016)
- **GIS Professional (GISP) Certification**, GIS Certification Institute, Certification #91113 (Aug. 2015)

FEMA Certificates: - IS-100.C - IS-103 -IS 230.D -IS-321-IS-922

GRANTS, AWARDS AND HONORS

- 2019 - Winner, ESRI Story map competition, Seven Hills Region User Group, Third Place. Tallahassee, Fla.
- 2016- 2018: Grant Award, Florida State University, Graduate Research Grant, Annual; \$1,000;
- 2016: Grant Award, The National Academies of Science, Engineering and Medicine: “*Multidisciplinary knowledge integration to support Louisiana coastal indigenous communities’ response to natural and technological disasters and adaptation to climate change.*” \$312,000
- 2015: Grant Award, West-Russell Field Research Grant: “*Catastrophism, Gradualism and the Mississippi Gulf Coast.*” \$500
- 2015: Winner, First Place, Gilbert F. White Thesis/Dissertation Award from the Hazards, Risks and Disasters Specialty Group of the Association of American Geographers, Annual Conference; San Francisco, Ca.
- 2014: Winner, First place, Graduate Student Paper Presentation Contest, Paleo-environmental Change Specialty Group of the Association of American Geographers, Annual Conference; Tampa, Fl.
- 2014: Winner, Second Place, and Audience Favorite, Three Minute Thesis Competition, Louisiana State University (University-wide)
- 2013: Winner, First Place, Graduate student poster competition, Southwestern Division of the Association of American Geographers 2013 Annual Conference; Nacogdoches, Texas
- 2013: Dean Appointment to the Louisiana State University Transition Advisory Committee, one of two graduate students representing the student body.
- 2007-2010: Student-elected representative to the Syracuse University Newhouse School of Public Communication Council, 2007-2010
- 2006: Outstanding Delegate Award, Addressing the Specter of Global Warming, Gannon University, United Nations Conference.

Synergistic Activities and Research Partners

2016- U.S. Fish and Wildlife Service, St. Marks National Wildlife Refuge, St. Marks, Fla.

2016- Florida Master Site File Office, Tallahassee, Fla.

2015- Louisiana Department of Archaeology, Baton Rouge, La.

2015- Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Indians, Terrebonne Parish, La.

2015- Pointe-au-Chien Indian Tribe, Terrebonne-Lafourche Parish, La.

2014- Live Oak Society, Baton Rouge, La.

2014- Monumental Trees Society, United States Chapter, Southeast

2014- Reviewer for the Journal of Coastal Research

2011- Member, Association of American Geographers (AAG)

2011- Member, American Geophysical Union (AGU)

2011- Member, American Meteorological Society (AMS)

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PRE-PROFESSIONAL, VOLUNTEER WORK and ODD JOBS

2012 Communications assistant, Greater Baton Rouge Clean Cities Coalition, Baton Rouge, LA.
2012 Freelance writer, The Advocate, Baton Rouge, LA.
2008-2011 Feature Editor and Student Business Manager, The Daily Orange; Syracuse, NY.
2011 Desk Clerk, Holiday Inn; Syracuse, NY.
2011 Writer and Web Editor, DemocracyWise.Syr.Edu; Syracuse, NY
2011 Videographer, The Newshouse of Syracuse University; Syracuse, NY.
2010- 2011 Writer and Web Editor, Democracy in Action; Syracuse, NY.
2010 Receptionist, Syracuse University LGBT Resource Center; Syracuse, NY.
2010 English teacher's assistant, The New School; New York, NY.
2009 Staff Writer and Photographer, The Stone County Enterprise; Wiggins, MS.
2008 River and canoe guide, Black Creek Canoe Rentals and Excursions, Brooklyn, Miss.
2006-2007 Desk Clerk, Best Western Woodstone; Wiggins, MS
2005-2006 Waitress, Pizza Inn; Wiggins, Miss.

ACTIVITIES

2018- Volunteer, Americorps, Hurricane Michael aid, Coastal Florida, USA
2018 – EnvironMentors program participant and educator, American Association of Geographers, Tallahassee, Fla.
2016-2017 Volunteer tutor, Leon County Public Schools, Math, Science, English and Writing, Florida
2015- Volunteer GIS analyst, URISA-GIS Corps, Multiple Locations, USA and Canada
2015- Volunteer Designer and Writer, Non-profit Youth Action, Multiple Locations, USA
2015-2016 Baton Rouge Soccer Club Youth League Volunteer Coach 2012-2013 LSU Quidditch Team, Beater, Outreach Manager, Fundraising Manager
2010-2013 Volunteer book reader and science teacher (various schools, locations)
2009-2012 Syracuse University Quidditch, Beater, Team Captain, Fundraising Coordinator
2007-2009 Volunteer dog walker at local SPCA chapter
FOREVER Fanatical FC Barcelona Fan
FOREVER Devoted New Orleans Saints Fan
FOREVER Occasional artist (painter, designer and writer of all things known and fiction)