

## Carrie Jensen

Geospatial and Environmental Analysis Program  
Virginia Polytechnic Institute and State University  
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### RESEARCH INTERESTS

- Hydrological connectivity; stream wetting and drying dynamics; storm events
- Fluvial geomorphology
- Anthropogenic impacts on watershed hydrology; riparian buffers
- Service learning

### EDUCATION

- **Ph.D. Student**, Geospatial and Environmental Analysis, Virginia Polytechnic Institute and State University, expected graduation May 2018, GPA: 4.0, Advisor: Dr. Kevin McGuire  
*Dissertation (in progress): "Stream Length Dynamics in Headwater Catchments Throughout the Appalachian Highlands"*
- **M.S.**, Geography, Graduate Certificate of Water Resources, University of Georgia, May 2013, GPA: 4.0, Advisor: Dr. David Leigh  
*Thesis: "Scales and Arrangements of Large Wood in Streams of the Blue Ridge Mountains."*
- **B.S.**, Geography, **B.A.**, Spanish, Certificate of Geographic Information Science, Honors Program, University of Georgia, May 2011, GPA: 4.0, Graduated Summa Cum Laude, First Honor Graduate, Advisor: Dr. Kathy Parker  
*Undergraduate honors thesis: "The Growth Response of Slash Pine (Pinus elliottii) to Climate in the Georgia Coastal Plain."*

### AWARDS AND RECOGNITION

- Graduate Student Association Graduate Research Development Fund Award, 2015, \$950
- Consortium of Universities for the Advancement of Hydrologic Science Pathfinder Fellowship, 2015, \$2,445
- George H. and Gladys H. Cunningham Doctoral Scholar Assistantship Award, Virginia Polytechnic Institute and State University, 2014-Present
- Graduate School Assistantship, University of Georgia, 2011-2013
- HOPE Scholarship, 2007-2011; Charter Scholarship, 2007-2011; Robert C. Byrd Scholarship, 2007-2011; Governor's Scholarship, 2007-2009; WAEPA Scholarship, 2008-2011; Murphy Study Abroad Scholarship, 2008

- Presidential Scholar, 2007-2011

## RESEARCH AND PROFESSIONAL EXPERIENCE

- **Graduate Assistant, Virginia Polytechnic Institute and State University Geospatial and Environmental Analysis Program**, 2014-Present. Characterize and model stream network expansion and contraction in headwaters of the Appalachians.
- **Environmental Change Laboratory Assistant, University of Georgia Department of Geography**, March 2013-May 2013. Extracted chironomids from sediment samples taken from the Snowmastodon site in Colorado for paleoclimate reconstruction. Assisted with other laboratory tasks such as preparing samples and mounting slides.
- **Graduate Assistant, University of Georgia Department of Geography**, 2011-2013. Examined the variability of large wood in Blue Ridge streams as a function of landscape at different spatial and temporal scales.
- **Coweeta Long-Term Ecological Research Undergraduate Intern, University of Georgia Department of Geography**, July 2011-August 2011. Assisted with field work in the Little Tennessee River basin photographing canopy cover and river morphology. Assembled climate data for stations in the Blue Ridge. Extracted phytoliths from sediment samples.
- **Geographic Information Science Intern, University of Georgia Department of Geography**, January 2011-May 2011. Center for Geospatial Research. Performed detailed vegetation mapping of the Cherokee Reservation in the Great Smoky Mountains from aerial photographs using a stereoscope.
- **Dendrochronology Laboratory Assistant, University of Georgia Department of Geography**, January 2010-May 2011. Collected slash pine tree cores from the Wormsloe State Historic Site in Savannah, Georgia and performed cross-dating.

## TEACHING EXPERIENCE

- **Workshops:** Effective Service-Learning Primer, Center for Instructional Development and Educational Research (CIDER), March 2016
- **Teaching Assistant and Co-instructor, Virginia Polytechnic Institute and State University Department of Forest Resources and Environmental Conservation, FOR 3104: Principles of Watershed Hydrology**, January 2016-May 2016. Developed an independent study to gain teaching experience, which involved faculty observation, readings and workshops on pedagogy, leading lectures, creating and grading student assessments, and writing reflections.
- **Virginia Polytechnic Institute and State University Department of Forest Resources and Environmental Conservation, FOR 3104: Principles of Watershed Hydrology**, February 2015. Taught a lecture on precipitation measurement and estimation methods.
- **Teaching Assistant, Virginia Polytechnic Institute and State University Department of Forest Resources and Environmental Conservation, FOR 1004/GEOG 1084: Digital Planet**, January 2015-May 2015. Attended lectures to answer questions from

students during daily QGIS exercises, met with students outside of class to help with assignments, and graded homework.

- **Teaching Assistant, Virginia Polytechnic Institute and State University Department of Forest Resources and Environmental Conservation, FOR 4354: Forest Soils and Watershed Management**, August 2014-December 2014. Led a field laboratory on stream discharge, graded problem sets, and assisted with student transportation to field laboratories.

## PUBLICATIONS

- Jensen, C.K., Leigh, D.S., & Jackson, C.R. (2014). Scales and arrangements of large wood in first- through fifth-order streams of the Blue Ridge Mountains. *Physical Geography*, 35(6), 532-560.
- Parker K.C., Jensen, C.K., & Parker, A.J. (2014). The growth response of slash pine (*Pinus elliottii*) to climate in the Georgia coastal plain. *Dendrochronologia*, 32(2), 127-136.

## CONFERENCE PRESENTATIONS

- Jensen, C.K., & McGuire, K.J. “Active Stream Length Dynamics in Headwater Catchments Spanning Physiographic Provinces in the Appalachian Highlands.” Poster session presented at the 2015 American Geophysical Union Fall Meeting, San Francisco, California.
- Jensen, C.K., & Leigh, D.S. “Scales and Arrangements of Large Wood in Streams of the Blue Ridge Mountains.” Poster session presented at the 2013 Coweeta Long-Term Ecological Research Summer Meeting, Otto, North Carolina.
- Bonney, S.N., Jensen, C.K., Mullen, J.D., Dowd, J., Bartenstein, C.S., & Robinson, K.A. “The Use of a Stream-Aquifer Model (SAM2) and an Endangered Mussel Damage Function in Order to Recommend Ground Water Valuation and Policy Changes for Future Irrigation Reduction Auctions in the Lower Flint River Basin, Georgia, United States.” Presented at the 2013 American Water Resources Association Summer Specialty Conference: Environmental Flows, Hartford, Connecticut.
- Parker, A.J., Parker, K.C., & Jensen, C.K. “Dendroclimatic Reconstruction of Drought with Slash Pine at Wormsloe Plantation.” Presented in a special session sponsored by the Biogeography Specialty Group at the 2011 Association of American Geographers Annual Meeting, Seattle, Washington.

## SERVICE TO COMMUNITY AND DISCIPLINE

- Volunteer at UGarden, which uses sustainable agriculture practices and provides organic produce to low-income families, 2012-2013
- Clarke County Schools interpreter for Latino families during parent-teacher conferences, 2009-2013

- Assisted Dr. David Leigh with sample processing in the University of Georgia Geomorphology Laboratory, August-December 2009
- Assisted University of Georgia Geography M.S. student Jake McDonald with field work, October 2009

### **SKILLS AND CERTIFICATIONS**

- ArcGIS; R; QGIS; Microsoft Office; ERDAS Imagine; CSCI 1301 Introduction to Java Computer Programming
- Fluent in conversational and written Spanish

### **MEMBERSHIPS AND AFFILIATIONS**

- American Geophysical Union Member, 2015-Present
- Gamma Theta Upsilon Geographic Honor Society, 2010-2011
- Phi Beta Kappa Academic Honor Society, 2009-2011
- University of Georgia Triathlon Club Racing Member, 2007-2011; Social Chair, 2009-2011