

# *L. Jesse Rouse, BS, MA, RPA, GISP*

## **Present Address:**

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## **Education**

- **Ph.D. Candidate in Geography**
  - *West Virginia University; Morgantown, WV* *Forthcoming*
  - Dissertation title - *Phenomenology and Geographic Information Science: experiencing landscape through geospatial technologies.*
  - Advisor - Dr. Trevor Harris.
- **Master of Arts in Geography**
  - *West Virginia University; Morgantown, WV* *2000*
  - Thesis title - *Data Points or Cultural Entities?: a GIS-based archaeological predictive model in a post-positivist framework.*
  - Advisor - Dr. Trevor Harris
- **Bachelor of Science in Anthropology**
  - *Appalachian State University; Boone, NC* *1996*
  - Focus - Archaeology of shell-bearing sites.
  - Advisor - Dr. Cheryl Claassen

## **Awards**

- **Trevor and Sylvia Harris GIScience Scholarship**
  - *Department of Geology and Geography, WVU, Morgantown, WV* *2007*
- **Special Achievement in GIS**
  - *ESRI, Inc.; Redlands, CA* *2007*
  - Awarded to VerySpatial, LLC. for New Media efforts to increase understanding about current Geography trends and geospatial technologies.
- **Vehse Award**
  - *Eberly College of Arts and Sciences; Morgantown, WV* *2001 and 2003*
  - Only one awarded per department per year.

## **Professional Certifications**

- **GIS Professional**
  - GIS Certification Institute
- **Registered Professional Archaeologist**
  - Register of Professional Archaeologists

## Professional Experience

- **Instructor**
  - *University of North Carolina at Pembroke; Pembroke, NC* 2009-Present
  - Faculty in the Department of Geology and Geography.
- **Geospatial Technology Director/Producer**
  - *VerySpatial LLC.* 2005-Present
  - Produce and direct New Media content for Geography and geospatial technologies outreach.
  - Conduct GIS training.
- **Technical Support / Graduate Teaching Assistant**
  - *West Virginia University; Morgantown, WV* 2007-2009
  - Support System Administrator in deploying and maintaining all lab and office computers for the Department of Geology and Geography and developing current department website.
- **GIS Technician**
  - *Monongalia County Solid Waste Authority; Morgantown, WV* July-September 2008
  - Conducted GIS needs assessment, base mapping and database creation to support USDA grant.
- **Lecturer**
  - *West Virginia University; Morgantown, WV* 2003-2007
  - Taught several undergraduate and graduate courses in the Department of Geology and Geography (see *Teaching* below for class details)
- **Geospatial Technology Coordinator**
  - *West Virginia University; Morgantown, WV* 2006-2007
  - Oversight of GIScience research projects focusing on Humanities GIS in the Laboratory of Geographic Information Science, Department of Geology and Geography, Trevor Harris, PI.
- **Geospatial Technology Coordinator**
  - *West Virginia University; Morgantown, WV* 2004-2006
  - Oversight of GIScience research projects focusing on the integration of natural resources and geospatial technologies in National Geospatial Development Center, a collaboration between the Department of Geology and Geography and the Natural Resources Conservation Service, Trevor Harris, PI.
- **Project Coordinator**
  - *West Virginia University; Morgantown, WV* 2002-2004
  - Coordination of student labor on multiple GIScience projects in the Laboratory of Geographic Information Science, Department of Geology and Geography, Trevor Harris, PI.
- **Graduate Research Assistant**
  - *West Virginia University; Morgantown, WV* 2000-2002
  - Conduct research focusing on GIScience and cultural Resources in the Laboratory of Geographic Information Science, Department of Geology and Geography, Trevor Harris, PI.
- **Instructor**
  - *Fairmont State College; Fairmont, WV* 2001
  - Taught *Introduction to Geography* for the Department of Behavioral Sciences.
- **Staff Archaeologist**
  - *Horizon Research Consultants; Morgantown, WV* 1996-1999
  - Responsibilities included field supervisor, crew chief, laboratory supervisor, proposal and report writing, and cartography, Gloria Gozdzik, PI.

## Classes Taught

- **Principles of Geography**
  - *University of North Carolina at Pembroke* 2009
  - Instructor, An introduction to the physical and cultural elements of geography with a study of major geographical regions of the world.
  
- **World Regional Geography**
  - *West Virginia University & UNC at Pembroke* Current
  - Lecturer, Comparison and relationships of world regions. Geographical perspectives of contemporary global problems. Developing regions contrasted with modernized regions and the consequences of their interactions.
  
- **Cartography**
  - *University of North Carolina at Pembroke* 2010
  - Instructor, Concepts and skills of map use and interpretation. Cartographic techniques and conventions for production of thematic maps.
  
- **Geovisualization and the CAVE**
  - *West Virginia University* 2009
  - Co-Lecturer with Sue Bergeron and Dr. Trevor Harris, In depth discussion of visualizing geographic information using computer technologies including immersive environments such as a CAVE (Cave Automatic Virtual Environment).
  
- **Introduction to Geographic Information Science**
  - *West Virginia University & UNC at Pembroke* 2007 & '10
  - Lecturer, Fundamental principles of geographic information systems (GIS) and spatial data handling in a computer environment; sources, analysis, and display of geographical information for planning and decision making.
  
- **GIS Applications**
  - *West Virginia University* 2004, '06 & '09
  - Lecturer and Co-Lecturer with Dr. Trevor Harris, Operational and management issues in planning management analysis, locational decision making, and design and implementation of GIS. Lab project emphasizes student's specialization.
  
- **Advanced GIS**
  - *West Virginia University* 2003
  - Co-Lecturer with Dr. Trevor Harris, Functional strengths and weaknesses of GIS. Related geographical information, science technologies, GPS, remote sensing, multimedia, spatial statistics, and expert systems. Multi-dimensionality (4-D GIS), temporality, social implications of GIS.
  
- **Exploratory Spatial Data Analysis**
  - *West Virginia University* 2003
  - Co-Lecturer with Dr. Trevor Harris, Principles, algorithms and applications of Exploratory Spatial Data Analysis (EDA) and Scientific Visualization for undertaking geographical inquiry. These techniques offer a powerful approach to geographical data analysis and provide a distinctive and alternative strategy to that traditionally provided in classical inferential statistics classes.
  
- **Introduction to Geography**
  - *Fairmont State College* 2001
  - Instructor, An introduction to the physical and cultural elements of geography with a study of major geographical regions of the world.

## Publications

- Rouse, L. J.
- Forthcoming (2011) “Putting Digital Earth to work: Earth Observation sensors and data” Proceedings of the ESRI Education User Conference, July.
- Harris, T. M., S. J. Bergeron, and L. J. Rouse
- 2011. “Humanities GIS: adding spatial storytelling and immersive visualization into the Humanities.” *Geohumanities: Art, History, Text at the Edge of Place*, Routledge.
- Harris, T. M., S. J. Bergeron, and L. J. Rouse
- 2010. “The Geospatial Semantic Web, Pareto GIS, and the Humanities.” in *Spatial Humanities*, Bodenhamer, D. J., T. M. Harris, and J. Corrigan, Indiana University Press.
- Harris, T. M., L. J. Rouse, and S. J. Bergeron
- 2010. “The Geospatial Web and Local Geographical Education” in *International Research in Geographical and Environmental Education*, Vol 19, No 1, pp 63-66.
- Rouse, L. J.
- 2009 “Scapes: Inserting Culture in Prehistoric Landscapes” Proceedings of the ESRI International User Conference, July.
- Bergeron, S. J., H. F. LaFone, and L. J. Rouse
- 2008 “Rewind 2008: LBS Coming of Age” *geospatial Today*, December.
- Rouse, L. J., S. J. Bergeron and T. M. Harris
- 2007 “Participating in the Geospatial Web - Collaborative Mapping, Social Networks, and Participatory GIS” In *The GeoSpatial Web*. Arno Scharl, Klaus Tochtermann (Eds.), London:Springer.
- Bergeron, S. J., L. J. Rouse, and H. F. LaFone
- 2006 “Unfiltered: New Media in GIS and geospatial technologies” *ArcUser Magazine*.
- Rouse, L. J. and S. J. Bergeron
- 2006 “Podcasting: new digital media for the geospatial masses” *GEO:connexion International*.
- Harris, T. M., R. Alagan, and L. J. Rouse
- 2002 “Geo-visualization approaches to PGIS decision-making in Environmental Impact Assesment” in the proceedings of the First Annual Public Participation GIS Conference, URISA, Rutgers University, pp180-183.
- Rouse, L. J. and T. M. Harris
- 2002 “A cultural landscape approach to archaeological predictive modeling” in the proceedings of the 10<sup>th</sup> Biannual Conference on Appalachian Geography and Geography Education.

## Grants

- North Carolina Space Grant, Informal Education and Public Outreach Program, 2010.
  - Principal Investigator - “Putting the Digital Earth to Work: Introducing Potential Science and Social Studies Users to Earth Observation Sensors and their Data”.
- IGC Travel Grant awarded by the Association of American Geographers, 2004.
  - To present at the 2004 meeting of the International Geographic Union conference in Glasgow, Scotland
- Phase 0 SBIR awarded by the West Virginia Small Business Development Council, 2003
  - “Park Education Enhancement and Management Tool” submitted in conjunction with Greenlight Research, LLC.

## Research Interests

- **Geographic Information Science** - Spatial information is integral to capturing data about our world, GIScience is the window into how best to capture, explore and represent the physical and cultural world.
- **GIS and Cultural Landscapes** - Cultural landscapes is a contextual discipline, analyzing and interpreting features that exist in space and at multiple scales. GIS offers a framework to capture and explore recovered material culture.
- **Participatory GIS, Web 2.0 mapping and social networking** - Corporations are becoming the purveyors of spatial information, leaving Geographic research to catch up. How is this changing our discipline and what impact will it have on spatial literacy?
- **Formal and informal Geography education** - Online courses and unstructured educational materials are creating new ways to present education materials to students in more approachable ways for new types of learners.

## Select Paper Presentations

### Recent presentations, 43 papers presented in total

Rouse, L. J.

- 2011 "Putting Digital Earth to Work: Earth Observation Sensors and their Data." Paper presented at the Annual ESRI Education User Conference, San Diego

Rouse, L. J.

- 2011 "Reaching out to highlight Geography: taking advantage of New Media and webmapping technologies to broaden geographic awareness." Paper presented at the Annual Meeting of the Association of American Geographer, Seattle.

Rouse, L. J.

- 2011 "From AmericaView to NCView: Earth observation and you." Paper presented at the NCGIS Academic Assembly, Raleigh.

Rouse, L. J.

- 2010 "Principia Geographica - or how I found data and what I did to it when I found it." Lightning talk presented at the Annual ESRI Education User Conference, San Diego

Rouse, L. J. and S. J. Bergeron

- 2009 "Building and Experiencing Virtual Worlds." Paper presented at the Annual Meeting of the Association of American Geographer, Las Vegas.

Rouse, L. J. and S. J. Bergeron

- 2009 "The development and use of virtual worlds in the classroom." Paper presented at the Annual ESRI Education User Conference, San Diego

Rouse, L. J.

- 2009 "Scapes: Inserting culture in prehistoric landscapes." Paper presented at the Annual ESRI International User Conference, San Diego.

Rouse, L. J. and S. J. Bergeron

- 2009 "Building and Experiencing Virtual Worlds." Paper presented at the Annual Meeting of the Association of American Geographer, Las Vegas.

Harris, T. M., L. J. Rouse, and S. J. Bergeron

- 2008 "Immersive and experiential GIS and the Humanities." Paper presented at the Historical GIS 2008 conference, Essex.

- Rouse, L. J.
- 2008 “The role of New Media in informal Geography education: Getting the word out from classroom to outreach.” Paper presented at the Association of American Geographer, Boston.
- Rouse, L. J., S. J. Bergeron, and T. M. Harris
- 2007 “Developing immersive virtual reconstructions for historical and cultural landscape analysis.” Paper presented at the Annual Social Science History Association Meeting, Chicago.
- Harris, T. M., S. J. Bergeron, and L. J. Rouse
- 2007 “GIS, immersive visualization, and virtual worlds: promoting a sense of ‘place’ and ‘being there’.” Paper presented at the Social Science History Association, Chicago.
- Harris, T. M., S. J. Bergeron, and L. J. Rouse
- 2007 “Humanities GIS: adding spatial story telling, spatialization, contextualization, place, and experiential virtual immersion into the Humanities.” Paper presented at the Geography and Humanities Symposium, Charlottesville.
- Bergeron, S. J, T. M. Harris, and L. J. Rouse
- 2007 “Geovisualization in Historical Geography: virtual reconstruction of Morgantown, West Virginia” Paper presented at the ESRI International User Conference, San Diego.
- Rouse, L. J., S. J. Bergeron, and H. F. Lafone
- 2007 “Sharing Ideas and Spreading the Word: Geography Blogs and Podcasts” Paper presented at the ESRI Education User Conference, San Diego.
- Harris, T. M., L. J. Rouse, and S. J. Bergeron
- 2007 “Humanities GIS and Geospatial Semantic Web: Towards a convergence of Digital Humanities, the WWW, and Geospatial Technologies.” Paper presented at the Annual Meeting of the American Association of Geographers, San Francisco.
- Bergeron, S. J., L. Kammer, L. J. Rouse, Z. Pride, and T. M. Harris
- 2007 “Recreating a BoomTown: a virtual reconstruction of a 19<sup>th</sup> century urban landscape.” Paper presented at the American Association of Geographers, San Francisco.
- Bergeron, S. J. and L. J. Rouse
- 2006 “GIS for Everyone? The growth of the Geospatial Web” Paper presented at the GIS in the Appalachians conference, Morgantown.
- Rouse, L. J., T. M. Harris, and S. J. Bergeron
- 2006 “Cognition, Higuchi indexes and Landscape Archaeology: Linking experience and GIS in the Humanities.” Paper presented at the Society for American Archaeology, San Juan.
- Rouse, L. J., S. J. Bergeron, and T. M. Harris
- 2006 “The Googlization of Archaeology: Global archaeology, GIS, and Virtual Reality,” Paper presented at the Annual Meeting of Society for American Archaeology, San Juan.
- Rouse, L. J. and T. M. Harris
- 2006 “The Role of Higuchi Indexes in Landscape Archaeology: Linking experience and GIS for the humanities.” Paper presented at the American Association of Geographers, Chicago.
- Bergeron, S. J, T. M. Harris, and L. J. Rouse
- 2005 “Multimedia GIS and geovisualization in historical and cultural landscape analysis” Paper presented at the Annual Meeting of the American Association of Geographers, Denver.
- Harris, T. M. and L. J. Rouse
- 2005 “The Higuchi approach to viewing landscapes through GIS” Paper presented at the Annual Meeting of the American Association of Geographers, Denver.

## Select Poster Presentations

### Recent posters, 23 posters presented in total

Rouse, L. J.

- 2010 “It’s OK to play with your data: Exploring local data to find new questions” Poster presented at the Annual Meeting of the Association of American Geographers, Washington, DC.

Rouse, L. J.

- 2008 “Finding meaning in cultural landscapes through viewshed analyses” Poster presented at the Annual Meeting of the Southeastern Division of the AAG, Greensboro.

Rouse, L. J.

- 2008 “Engaging the Virtual Landscape: serious gaming environments as tools in historical landscape reconstruction and interpretation” Poster presented at the Digital Humanities and Computer Science Colloquium, Chicago.

Bergeron, S., L. J. Rouse, and T. M. Harris

- 2008 “Geovisualization and immersive environments in Historical Geography and Landscape Analysis” Poster presented at the ESRI International User Conference, San Diego.

Bergeron, S., L. J. Rouse, and T. M. Harris

- 2007 “The Next Best Thing to Being There? GIS, Geovisualization and virtual reconstructions in historical geography and landscape analysis.” Poster presented at the Annual Social Science History Association Meeting, Chicago.

Bergeron, S., L. J. Rouse, and T. M. Harris

- 2007 “Geovisualization and immersive environments in Historical Geography and Landscape Analysis” Poster presented at the WVU Presidential Inauguration, Morgantown

Bergeron, S., A. Dawson, and L. J. Rouse

- 2005 “Mapping the Historic Resources of the New River Gorge National River”. Poster presented at the Research Horizons Workshops, WVU, Morgantown.

Rouse, L. J. and S. J. Bergeron

- 2005 “Podcasting and Blogging: digital media for the masses.” Poster presented at the Research Horizons Workshop, WVU, Morgantown.

Rouse, L. J.

- 2005 “Back in the saddle again: A consideration of differing models of landform data generation” Poster presented at the Annual Meeting of the American Association of Geographers, Denver.

Bergeron, S., L. J. Rouse, and T. M. Harris

- 2004 “Internet-based GIS as a tool in prehistorical cultural landscape analysis” Poster presented at the Annual Meeting of the American Association of Geographers, Philadelphia.

## **Organized Sessions and Conferences**

### **Sessions and conferences organized**

- 2011 “Geography and geospatial technologies outreach.” Session organized for the Annual Meeting of the Association of American Geographers, Seattle, WA.
- 2010 “Digital Media and Learning in Geography.” Session organized for the Annual Meeting of the Association of American Geographers, Washington, DC.
- 2008 “New Media, New Tools, New Audiences: The role of social media in Geography.” Session organized for the Annual Meeting of the Association of American Geographers, Boston.
- 2007 “Spread the word about Geography: Podcasting, blogging, and the New Media.” Session organized for the Annual Meeting of the Association of American Geographers, San Francisco.
- 2006 “The papyrus calls: a panel on academic publishing.” Session organized for the Annual Meeting of the Association of American Geographers, Chicago.
- 2006 “Getting a Job.” Session organized for the Annual Meeting of the Association of American Geographers, Chicago.
- 2006 “Unfiltered: Podcasting, blogging, and knowledge transmission.” Session organized for the Annual Meeting of the Association of American Geographers, Chicago.
- 2005 “Making your own way: Grant proposal writing for graduate school and beyond” Session organized for the Annual Meeting of the Association of American Geographers, Denver
- Co-Organizer - GIS in the Appalachians Conference, part of the WVGIS Conference & Workshops 2004 and 2006.

## **Select Technical Reports**

### **Select Technical Reports, 28 reports total**

Gozdzik, G., S. J. Bergeron, and L. J. Rouse

- 1999 Phase I Cultural Resource Investigations of the proposed CNG Transmission TL-474 Ext. 2 Natural Gas Pipeline, Armstrong County, Pennsylvania.

Gozdzik, G., S. J. Bergeron, L. J. Rouse, and J. Mutchka

- 1999 Phase II Cultural Resource Investigation of the proposed Western Regional Jail, Cabell County, West Virginia. Report submitted to the West Virginia Division of Culture and History.

Gozdzik, G., S. J. Bergeron, and L. J. Rouse

- 1998 Phase II Cultural Resource Investigations of the proposed Pleasants County Industrial Park.

Gozdzik, G., S. J. Bergeron, and L. J. Rouse

- 1997 A Predictive Model Integrating GIS and Archeology for the Wyoming-Cloverdale 765kV Transmission Line Project in McDowell, Mercer, Monroe, Raleigh, Summers, and Wyoming Counties, West Virginia. Environmental Assessment.

Gozdzik, G. and L. J. Rouse

- 1997 A Cultural Resource Report for the Jackson County Development Authority, Jackson County Rail Spur-Phase II.

## Professional Service

### Professional and university service

- Treasurer, Geography Education Specialty Group. 2011 to 2013  
· Association of American Geographers
- Student Board Member, Geography Education Specialty Group. 2009 to 2011  
· Association of American Geographers
- Chair, Graduate Student Affinity Group. 2004 to 2007  
· Association of American Geographers

## Professional Affiliations

### Current professional memberships

- National Council for Geographic Education
- Gamma Theta Upsilon, International Geographic Honor Society
- Association of American Geographers
- Southeast Division of the AAG
- International Geographical Union
- Urban and Regional Information Systems
- Register of Professional Archaeologists
- Society for American Archaeology

## Workshops

### Workshops organized and taught

- **Putting the Digital Earth to Work**  
· *Online; 2 hour webinar* 2011  
· Brief introduction to Earth Observation for formal and informal educators.
- **Introduction to ArcGIS 10**  
· *UNC Pembroke; 1 day workshop* 2011  
· Brief introduction to ArcGIS 10 with a hands-on exercises.
- **Introduction to ArcGIS 9.3.1**  
· *UNC Pembroke; Two hour workshop* 2010  
· Primarily descriptive overview of ArcGIS 9.3.1 with a short hands-on exercise.
- **Finding Spatial Data**  
· *UNC Pembroke; Two hour workshop* 2010  
· Hands-on walk through of a variety of spatial data and where they can be freely obtained.
- **Introduction to Geospatial Technologies**  
· *UNC Pembroke; Two hour workshop* 2009  
· Overview of geospatial technologies and data.

## Professional Training

### Training that is directly related to online teaching

- **Teaching with BlackBoard**
  - *Florida Community College at Jacksonville; Online Class* 2005
  - Focused on developing and teaching courses using the BlackBoard online teaching system.
- **CREOLE, CREating Optimum Learning Environments**
  - *Florida Community College at Jacksonville; Online Class* 2005
  - Four online modules: basic research and theory in learning, basic research and theory in motivation, applying these to the development and teaching of blended courses, and applying these to the development and teaching of fully online courses.

### Recent Training that is directly related to GIS and geospatial technologies

- **Introduction to ArcGIS I**
  - *ESRI Instructor-led Training; Pittsburgh, PA* 2008
  - Learn fundamental GIS concepts and become familiar with the range of functionality available in the software.
- **Introduction to ArcGIS II**
  - *ESRI Instructor-led Training; Pittsburgh, PA* 2008
  - Focuses on spatial analysis, automation of spatial and attribute data, editing, and advanced options for cartographic display.
- **Geoprocessing with ArcGIS Desktop**
  - *ESRI Virtual Campus; Online Class* 2007
  - Practical strategies for using the ArcGIS geoprocessing framework to accomplish GIS workflows.
- **Learning ArcGIS Spatial Analyst**
  - *ESRI Virtual Campus; Online Class* 2007
  - ArcGIS Spatial Analyst software supports a broad range of sophisticated spatial modeling and analysis applications.
- **Customizing ArcGIS Desktop**
  - *ESRI Virtual Campus; Online Class* 2007
  - By rearranging interface controls and taking advantage of available code samples, students learn how to tailor ArcGIS to match individual preferences and workflows.
- **ESRI Developers Summit**
  - *ESRI Conference; Palm Spring, CA* 2006-07
  - Focus on software development with ESRI's ArcGIS software
- **Learning ArcGIS 3D Analyst**
  - *ESRI Virtual Campus; Online Class* 2004
  - ArcGIS 3D Analyst software provides advanced tools for three-dimensional modeling and analysis.