

Abstracts, Presentations, Posters

1. Varanka, D., Ontological Foundations of Transportation Data for the National Map (USA) [abs.]: XXIII International Cartographic Conference abstracts with programs, August 4-10, 2007, Moscow, Russia, p. 161.
2. Wei, M., Zhao, T., Varanka, D., and Usery, E.L., 2008, A Conceptual Design Towards Semantic Geospatial Access, presented poster, GIScience 2008, Park City, Utah.
3. Varanka, D., Topographic Feature Inventories for National Mapping Ontology [abs.]: Annual Meeting of the Association of American Geographers, Boston, Massachusetts, April, 2008.
4. Varanka, D., Ontology Research for *The National Map*: Spatial Ontology Community of Practice Workshop, MITRE, McLean, Virginia, October 17, 2008. <http://socop.org/>
5. Varanka, D., National Topographic Modeling, Ontology-Driven Geographic Information in the Context of *The National Map*, First International Workshop on Information Semantics and its Implications for Geographical Analysis (ISGA '08) at GIScience 2008, the 5th International Conference on Geographic Information Science, Park City, Utah, September 23, 2008.
6. Varanka, D., A Topographic Feature Taxonomy For A U.S. National Topographic Mapping Ontology, International Cartography Conference, Santiago, Chile, November, 2009.
7. Varanka, D., Landscape Features, Technology Codes, and Semantics in U.S. National Topographic Mapping Databases, The International Conference on Advanced Geographic Information Systems & Web Services (GEOWS), Cancun, Mexico, February 1-7, 2009.
8. Varanka, D., Report on Building Ontology for *The National Map*: UCGIS/USGS Specialist Workshop, UCGIS Winter Assembly, Washington, D.C., February 3-4, 2009.
9. Varanka, D., Building Ontology for *The National Map*. Presentation for the Joint Mid-Continent Geographic Science Center/Center for Advanced Spatial Technologies, University of Arkansas, exploratory research meeting, Rolla, MO, April 3, 2009.
10. Varanka, D., The Diffusion of U.S. Geological Survey Digital Geospatial Data Products for Research and Public Use [abs.]: 3rd International Symposium on the History of Cartography, University of Texas at Arlington, Arlington, Texas, October 10, 2010.
11. Varanka, D.E. and Caro, H.K., Spatial Relation Predicates for National Topographic Ontologies: Cognitive and linguistic aspects of geographic space in the age of ontology and cyber-infrastructure, Las Navas del Marques, Avila Province, Spain, July 5-9, 2010.
12. Varanka, D. and Jerris, T., Ontology Patterns for Complex Topographic Features. AutoCarto 2010, Orlando FL. Nov, 2010.

13. Varanka, D., Bulen, A., and Carter, J.J., Triple Data from *The National Map*. D., 3rd Annual Spatial Ontology Community of Practice (SOCoP) Workshop, Reston, Virginia, December 3, 2010. <http://www.socop.org/>
14. Varanka, D., Building Ontology for *The National Map*. USGS National Geospatial Program Products and Services Leads Research Meeting. January 31, 2011.
15. Varanka, D.E., A Topographic Feature Vocabulary for Ontology Development. GeoVoCamp. Washington, D.C. June 3, 2011.
16. Varanka, D., Semantic Web Technology for *The National Map* [abs]: *The National Map* Users Conference. Denver, Colorado, May, 2011.
17. Usery, E.L. and Varanka, D., Semantics for Complex Features from Images [abs]: American Society for Photogrammetry and Remote Sensing 2011 Annual Conference, May 1 – 5, Milwaukee, WI.
18. Varanka, D.E., 2011, Advances Toward Expanding Gazetteer Semantics. International Cartography Conference, Paris, France.
19. Varanka, D., 2011, The National Map Geospatial Semantic Linked Data. [Poster] USGS Information Product.
20. Varanka, D., Building Ontology for *The National Map* – So Far... Presentation for the Community for Data Integration, Semantic Web Working Group. Monthly meeting, Sept. 7, 2011.
21. Usery, E.L. and Varanka, D.E., USGS Needs and Advancements in Semantics of Geospatial Data and Cyber GIS: 4th Annual Spatial Ontology Community of Practice Workshop, Reston, Virginia, December 2, 2011.
22. Usery, E.L. and Varanka, D., Geomorphic Features on the Semantic Web [abs.]: Annual Meeting of the Association of American Geographers, New York, New York, April, 2012.
23. Varanka, D.E., Semantic Technology Research in Support of *The National Map*. USGS Core Science Systems (CSS) Senior Staff Meeting, March, 2012.
24. Varanka, D.E., Geospatial Semantics, A Basic Introduction. Introduction to Geospatial Semantics and Technology Workshop. University Consortium for Geographic Information Science (UCGIS) Symposium, May 29, 2012, Washington D.C.
25. Varanka, D.E., Topographic Feature Type Vocabularies for Ontology Design Patterns. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), July 2012.
26. Varanka, D.E., Rethinking the Meaning of Data for Integrated Science Problem Solving. EarthScienceOntolog, August 2012.

27. Varanka, D.E., Topographic Predicate Vocabularies for Ontology Patterns. AutoCarto 2012, September, 2012.
28. Varanka, D.E. The Development of a National Hydrography Dataset for the Geospatial Semantic Web. Annual Meeting of the Association of American Geographers, Los Angeles, California. April 12, 2013.
29. Varanka, D.E. Category Spatial Relations. Basic Formal Ontology 2.0, Buffalo New York, May 13, 2013.
30. Varanka, D.E. The Development of the National Hydrography Dataset for Geospatial Semantic Science. Consortium of Universities for the Advancement of Hydrological Science, Inc. (CUAHSI). July 19, 2013.
31. Varanka, D.E. Geospatial Semantic Technology Architecture to Support an Academic Program. Workshop on Semantics in Geospatial Architectures, Applications and Implementation. University of Wisconsin-Madison. October 29, 2013.
32. Varanka, D.E. A Consideration of Geospatial Feature Formation in Linked Open Vocabularies. Workshop on Linked Open Data: Activities, Idea, Practices. GI_Forum 2014. July 1, 2014, Salzburg, Austria.
33. Varanka, D.E. An Applied Ontology of the National Hydrography Dataset and Watershed Boundary Database. AutoCarto 2014, Pittsburg, Pennsylvania. October 7, 2014.
34. Varanka, D.E. An Applied Ontology of Semantics Associated with Surface Water. Annual Meeting of the Association of American Geographers, Chicago, Illinois, April 24, 2015.
35. Varanka, D.E. A Semantic Analysis for NHD Linked Open Data. Community for Data Integration, Lakewood, Colorado, May 13, 2015.
36. Varanka, D.E. Adapting the United States National Hydrography Dataset to Linked Open Data. International Cartography Conference, Rio de Janeiro, Brazil, August 27, 2015.
37. Lieberman, J., Cheatham, M., and Varanka, D.E. 2015. Applicability of Alignment Methodologies to Spatial Ontologies in the Hydro Domain [poster]. American Geophysical Union (AGU)
38. Lieberman, J., Cheatham, M., and Varanka, D.E. Application of Alignment Methodologies to Spatial Ontologies in the Hydro Domain [abs]: American Geophysical Union (AGU), Thursday, 17 December 2015.
39. Varanka, D.E. Spatial Aspects of Hydrography Ontology Alignment. Annual Meeting of the Association of American Geographers, San Francisco, California, April 1, 2016.

40. Varanka, D.E. Geo-semantic Linked Open Data for National Topographic Data and Mapping. Missouri State University Colloquium, April 22, 2016.
41. Varanka, D.E. A Manual Alignment of Three Hydrography Ontologies. AutoCarto 2016. September, 2016.
42. Varanka, D.E. An Introduction to Resource Description Framework (RDF) and How It Could Benefit The National Map. Cyber-presentation for the Federal Geographic Data Committee (FGDC) Standards Working Group. September 27, 2016.
43. Varanka, D.E. and Usery, E.L. A Map as a Knowledgebase. Abstract for International Cartography Conference 2017, Washington D.C., July 2017.
44. Usery, E.L. and Varanka, D.E. 2017. A Map as a Semantic Web Knowledge Base. [abs.] Association of American Geographers Annual Meeting, Boston Mass.
45. Varanka, D.E. An Interactive Map Interface for Geospatial Linked Data. Annual Meeting of the American of Association of Geographers 2018, New Orleans, LA. April 13, 2018.
46. Varanka, D.E., Powell, L.J., and Baumer, W.L. Maps as Graphs: An Interactive Map Interface for Geospatial Linked Data. UCGIS 2018 Symposium and CaGIS AutoCarto, May 24, 2018.
47. Usery, E.L. Varanka, D.E. The Evolution of Cartography in the Digital Age: From Digitizing Vertices to Intelligent Maps. UCGIS 2018 Symposium and CaGIS AutoCarto, May 24, 2018.
48. Varanka, D.E. and Usery E.L, The Map as Knowledge Base. Poster presented at International Semantic Web Summer School (ISWS). July 2, 2018, Bertinoro, Italy.
49. Usery, E.L., Varanka, D.E., and Baumer. W.L. The Map as a Knowledge Base, A Semantic Approach to Cartography. NGTOC Need-to-Know presentation, Sept. 20, 2018.
50. Varanka, D.E. Invited keynote address/plenary presentation for the Seven Hills Regional Users Group – GIS (SHRUG-GIS). Nov. 7, 2018.
51. Varanka, D.E. Advances in National Hydrography Dataset Semantics. Earth Science Information Partners (ESIP) Federation Winter Meeting, January 14, 2019.