Joseph K. Berry

Principal, Berry & Associates // Spatial Information Systems 1701 Lindenwood Drive, Fort Collins, CO jberry@innovativegis.com Adjunct Faculty in Geosciences, University of Denver Adjunct Faculty in Natural Resources, Colorado State University



Education

Ph.D. emphasizing computer processing of remote sensing data (1976, Colorado State University)

Dissertation Topic, "Extracting Intrinsic Scene Features through Plant Canopy Reflectance Modeling," using stochastic computer modeling to predict vegetative biomass, composition and structure from spectral response (sponsored by NASA and DOD)

M.S. in Business emphasizing operations research and real estate (1973, Colorado State University)

B.S. in Forestry emphasizing forest management and remote sensing (1969, University of California, Berkeley)

Highlights and Qualifications (more information at www.innovativegis.com/basis/basis/cv_berry.htm)

Joseph K. Berry is the principal of BASIS, consultants and software developers in Geographic Information Systems (GIS) technology and serves as an Adjunct Faculty member in Geosciences at the University of Denver and an Adjunct Faculty member in Natural Resources at Colorado State University. He is a contributing editor for GeoWorld magazine, author of the "Beyond Mapping" column since 1989, written over two hundred papers on the analytic capabilities of GIS technology, and authored the popular books <u>Beyond Mapping</u> (1993 Wiley), <u>Spatial Reasoning</u> and <u>Map Analysis</u> (1995 Wiley), <u>Map Analysis</u> (2007 GeoTec) and the seminal online book series <u>Beyond Mapping I-IV</u> (www.innovativegis.com/basis/).

Dr. Berry is a recognized expert in grid-based map analysis and spatial modeling and has served as a senior consultant to numerous academic, public and private organizations for implementing and advancing GIS technology. He has continuously taught college courses on GIS modeling since 1977, mentored numerous graduate students, presented over 150 workshops for professionals and advised a diverse array of clients on specific technical procedures to include optimal path/corridor analysis, risk modeling, competition analysis, spatial statistics, probability surface modeling and suitability analysis within numerous application settings. He has written extensively on the future directions of GIS and served on numerous panels assessing geospatial industry outlook.

Employment History (more information at www.innovativegis.com/basis/basis/cv_berry.htm)

W. M. Keck Scholar in Geosciences

Department of Geography

Adjunct Faculty in Natural Resources

Warner College of Natural Resources

Owner and Principal

Consultants and software developers in GIS

President and CEO

Software developers in Geotechnology

President and CEO

Consultants in Geotechnology

Associate Professor and Associate Dean

School of Forestry and Environmental Studies

Research Associate

College of Natural Resources

1st Lieutenant

US and South Korea (Company Commander)

1999 - Present

University of Denver, Denver, CO

1988-Present

Colorado State University, Fort Collins, CO

1988-Present

Berry & Associates, Fort Collins, CO

1988-2000

Spatial Information Systems, Fort Collins, CO

1986-1988

Spatial Information Analysis, New Haven, CT

1976-1988

Yale University, New Haven, CT

1970-1976

Colorado State University, Fort Collins, CO

1969-1970

US Army Signal Corps

Selected Keynote and Plenary Sessions:

Map Analysis and Modeling in Forestry's Future: Where We are Headed and How We Can Get There, Esri Forestry GIS Solutions Conference, April 30-May 3, 2012, Redlands, CA. Plenary session.

Geotechnology in Transition: Evolution, Current Practice, Trends and Future Directions that are Moving Us Beyond Mapping, Geospatial Workshop for the City of Oslo, Oslo, Norway, September 2, 2010. Keynote address.

GIS in Higher Education, 24th Annual Conference on Geographic Information Systems, Toronto, Ontario, Canada, April 12-15, 2010. Plenary panel session.

Geospatial Industry Outlook, Opening Plenary Panel GeoTec 2009, 23nd Annual Conference on Geographic Information Systems, Toronto, Ontario, Canada, April 12-15, 2010. Plenary session.

Panel on Geospatial Jobs and the 2009 Economy, Location Intelligence Conference, Denver, Colorado, October 5-7, 2009. Plenary panel session.

So Where Is Precision Ag, presented at the 9th International Conference on Precision Agriculture, Denver, Colorado, July 21-23 2008. Keynote address.

GIS and Technical OZ: Discussion of the History, Driving Forces and Future Directions Guiding the Evolution/Revolution of Geotechnology, presented at the 23rd New York State Geographic Information Systems Conference, Albany, New York, October 1-3, 2007. Keynote address.

Mapping Geotechnology: A Brief History and Probable Future of Geotechnology, Association of American Geographers, Great Plains – Rocky Mountain Region Annual Meeting, Denver, Colorado, September 28-29, 2007. Keynote address.

Selected Book Chapters and Invited Publications/Presentations:

Beyond Mapping, a continuing series of monthly columns on Geotechnology in GeoWorld, a leading trade magazine (readership >200,000), Adams Business Media Publishers, Chicago, Illinois, 1989-present (272 columns as of June 2012). J.K. Berry. Note: search GeoWorld Archives (www.geoplace.com) on the key word "Beyond Mapping" to access online columns.

GIS Modeling and Analysis, book chapter in *Manual of Geographic Information Systems*, edited by Marguerite Madden, Section 5, Chapter 29, pages 527-585, published by American Society for Photogrammetry, Bethesda, Maryland, USA, ISBN 1-57083-086-X, 2009. J.K. Berry.

Advances in Precision Conservation, book chapter in *Advances in Agronomy* edited by Donald L. Sparks, volume 98, chapter 1, pages 1-44, Elsevier publishers, 2008. Jorge Delgado and J.K. Berry.

Beyond Location, Location, Location, invited feature article in GeoWorld magazine, Adams Business Media, Chicago, Illinois, Mar 2006, 19:3 22-25. J.K. Berry and K.L. Reed.

Quantifying Wildfire Risk, invited feature article in GeoWorld magazine, Adams Business Media, Chicago, Illinois, Dec 2005, 18:12 34-37. David Buckley, J.K. Berry, et. al.

A Consensus Method Finds Preferred Routing, invited feature article in GeoWorld magazine, Adams Business Media, Chicago, Illinois, April 2004, 17:4 24-27. J. Glasgow, J.K. Berry, et. al.

Wildfire Impact Modeling: Assessing Threat, Economic Exposure and Return on Investment for Mitigation Planning, GeoTec Conference on Geographic Information Systems, Vancouver, British Columbia, Canada, June 1-4, 2009. D. Buckley, J. Batchelor and J.K. Berry.

Selected Recent Workshops:

Making a Case for SpatialSTEM: Infusing Spatial Analysis and Statistics into Science, Technology, Engineering and Math Education at the College Level, Institute for Teaching and Learning, Colorado State University, Fort Collins, Colorado, August, 2012. 7-hour workshop organized as four sessions.

Map Analysis and Modeling: *Instructor Materials for Labs, Workshops and Courses*, 24th Annual Conference on Geographic Information Systems, Toronto, Ontario, Canada, April 12-15, 2010. 1.5 hour special session.

Map Analysis: Understanding Spatial Patterns and Relationships, an all day intermediate workshop presented at the GeoTec 23nd Annual Conference on Geographic Information Systems, Vancouver, B.C., Canada, June 1-4, 2009.

Grid-based Map Analysis and GIS Modeling, an all day intermediate workshop on map analysis principles, procedures, considerations and applications, Pecora 17 Conference, ASPRS, Denver, Colorado, November 16-20, 2008.

Grid-based Map Analysis Techniques and Modeling, an intensive 3-day hands-on special workshop for general faculty on infusing GIS technology into the classroom, Carleton College, Northfield, Minnesota, March 19-21, 2008.