Karl Benedict

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Professional Preparation

University of New Mexico	Albuquerque, NM	Anthropology	2004 - Ph.D. with distinction
University of New Mexico	Albuquerque, NM	Anthropology	1995 - M.A. with distinction
University of California	Berkeley, CA	Anthropology	1986 - B.A.

Relevant Appointments

University of New Mexico UNM College of University Libraries & Learning Sciences 2014-Present Assoc. Professor, Director of Research Data Svc., IT

Subject Librarian: Geography & Environmental Studies (2015-2020), Earth & Planetary Sciences, Computer Science (2015-19) Life Sciences (2015-16)

University of New Mexico UNM College of University Libraries & Learning Sciences 2014 Assistant Professor, Geospatial and Env. Data Scientist

University of New Mexico UNM Department of Geography & Environmental Studies 2008-Present Affiliated Faculty

University of New Mexico UNM Earth Data Analysis Center 2008-2014 Director

University of New Mexico UNM Department of Anthropology. Adjunct Professor 2004-Present University of New Mexico UNM Earth Data Analysis Center 2001-2008 Senior Research Scientist, Research Scientist, IT Manager

University of New Mexico UNM Office of Evaluation 2000 Project Assistant - Data Analyst

University of New Mexico UNM Earth Data Analysis Center 1999-2001 Project Assistant - Web Application Developer

National Park Service Pecos National Historic Park 1999-2001 Data Analyst

University of New Mexico UNM Department of Anthropology 1994-1997 Graduate Assistant - Computer Lab Manager

Ebert & Associates Data Analyst 1994-1995

Products

Five Most Related Publications and Other Products

John Faundeen, George Percivall, Shirley Baros, Peter Baumann, Peter Becker, J. Behnke, **Karl Benedict**, Lucio Colaiacomo, Liping Di, Chris Doescher, J. Dominguez, Roger Edberg, Mark Ferguson, Stephen Foreman, David Giaretta, Vivian B. Hutchison, Alex Ip, N.L. James, Siri Jodha S. Khalsa, B. Lazorchak,

Adam Lewis, Fuqin Li, Leo Lymburner, C.S. Lynnes, Matt Martens, Rachel Melrose, Steve Morris, Norman Mueller, Vivek Navale, Kumar Navulur, D.J. Newman, Simon Oliver, Matthew Purss, H.K. Ramapriyan, Russ Rew, Michael Rosen, John Savickas, Joshua Sixsmith, Tom Sohre, David Thau, Paul Uhlir, Lan-Wei Wang and Jeff Young. (2020). 'Chapter 6: Archiving and Access Systems for Remote Sensing', in: *Manual of Remote Sensing*. 4th ed. Stanley A. Morain, Michael S. Renslow, and Amelia M. Budge (eds). American Society for Photogrammetry & Remote Sensing. Bethesda, MD.

Gregory, A., Chen, C., Wu, R., Miller, S., Ahmad, S., Anderson, J. W., Barrett, H., **Benedict, K.**, Cadol, D., Dascalu, S. M., Delparte, D., Fenstermaker, L., Godsey, S., Harris, F. C. J., McNamara, J. P., Tyler, S. W., Savickas, J., Sheneman, L., Stone, M., & Turner, M. A. (2020). 'Efficient Model-Data Integration for Flexible Modeling, Parameter Analysis and Visualization, and Data Management'. *Frontiers in Water*, 2. https://doi.org/10.3389/frwa.2020.00002

Benedict, K. 2017. 'The Geographic Storage, Transformation and Retrieval Engine (GSToRE): A Platform for Active Data Access and Publication as a Complement to Dedicated Long-Term Preservation System'. In Curating research data. Volume two, A handbook of current practice (Vol. 2, pp. 207–209), Lisa R. Johnston, ed. Chicago, IL: Association of College and Research Libraries. Retrieved from http://bit.ly/CRDataV2

Wheeler, Jonathan, Karl Benedict. 2015. 'Functional Requirements Specification for Archival Asset Management: Identification and Integration of Essential Properties of Services Oriented Architecture Products'. *Journal of Map and Geography Libraries* 11(2). pp. 155-179. DOI: 10.1080/15420353.2015.1035474.

"Coffee and Code". 2017-2018. Workshop series and presentation platform developed by Karl Benedict and Jonathan Wheeler, with contributions by Mark Servilla and Elizabeth Cooper. Workshop series accessable from the UNM Research Data Services GitHub repository - http://github.com/unmrds

Other Significant Publications and Products

"Geographic Storage, Transformation and retrieval Engine Version 3". 2013. Geospatial data management, discovery and access platform and associated Application Programming Interface. Developed at the Earth Data Analysis Center at UNM under the direction of Karl Benedict. https://web.archive.org/web/20130704202601/http://gstore.unm.edu

"New Mexico Resource Geographic Information System". 2002. Web application developed by Karl Benedict to provide browsing, discovery and download of geospatial data published as part of the New Mexico Resource Geographic Information System Program at the Earth Data Analysis Center at the University of New Mexico. https://web.archive.org/web/20020913053314/http://rgis.unm.edu/

Leptoukh, G, R Kiang, R Soebiyanto, D Tong, P Ceccato, S Maxwell, R Rommel, G Jacquez, K Benedict, S Morain, P Yang, Q Huang, M Golden, R Chen, J Pinzon, B Zaitchik, D Irwin, S Estes, J Luvall, M Wimberly, X Xiao, K Charland, R Stumpf, Z Deng, C Tilburg, Y Liu, L McClure, and A Huff. 2012. 'Data Discovery, Access and Retrieval', in *Environmental Tracking for Public Health Surveillance*. Morain and Budge, eds. CRC Press, pp. 229–291.

Watson, Richard, Louis A. Scuderi, Karl Kent Benedict, and Theresa R. Kuntz. 2004. 'Data Fusion for Environmental Assessment: Integrating MODIS Imagery and NEXRAD Weather Radar'. International Society for Photogrammetry and Remote Sensing, 20th International Congress, Istanbul, June. *Archives* B-4:906-909

Synergistic Activities

- President of the Federation of Earth Science Information Partners 2012-2014, 2019-2020
- Member of the Board of Directors for the Foundation for Earth Science 2010-2017, 2019-2020 (Chair/President 2012-2017, 2019-2020)
- Technical Advisory Committee (Chair), Digital Preservation Network 2015-2018

- External Advisory Board Member, US Virgin Islands NSF EPSCoR Track 1 Project 2014-Present (Chair 2014-2019)
- \bullet Member of the Data Management and Communications (DMAC) Steering Committee of the Interagency Ocean Observation Committee (IOOC) 2011-2014
- Member of the National Advisory Council for Environmental Policy and Technology for the US Environmental Protection Agency (EPA) 2010-2012