# Karl Benedict

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## Professional Preparation

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|---|---|---|---|
| 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

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|---|---|---|
| University of New Mexico | UNM College of University Libraries & Learning Sciences Assoc. Professor, Director of Research Data Svc., IT *Subject Librarian*: Geography & Environmental Studies Earth & Planetary Sciences, Computer Science (2015-19) Life Sciences (2015-16) | 2014-Present |
| University of New Mexico | UNM College of University Libraries & Learning Sciences Assistant Professor, Geospatial and Env. Data Scientist | 2014 |
| University of New Mexico | UNM Department of Geography & Environmental Studies Affiliated Faculty | 2008-Present |
| University of New Mexico | UNM Earth Data Analysis Center Director | 2008-2014 |
| University of New Mexico | UNM Department of Anthropology. Adjunct Professor | 2004-Present |
| University of New Mexico | UNM Earth Data Analysis Center Senior Research Scientist, Research Scientist, IT Manager | 2001-2008 |
| University of New Mexico | UNM Office of Evaluation Project Assistant - Data Analyst | 2000 |
| University of New Mexico | UNM Earth Data Analysis Center Project Assistant - Web Application Developer | 1999-2001 |
| National Park Service | Pecos National Historic Park Data Analyst | 1999-2001 |
| University of New Mexico | UNM Department of Anthropology Graduate Assistant - Computer Lab Manager | 1994-1997 |
| Ebert & Associates | Data Analyst | 1994-1995 |
| University of New Mexico | UNM Computer Information Resources & Technology Help Desk Liaison | 1993-1996 |

## Products

### Five Most Related Publications and Other Products

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](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

### Five Other Significant Publications and Other 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.

Eric Fritzinger, Sergiu M. Dascalu, Daniel P. Ames, Karl Benedict, Ivan Gibbs, Michael J. McMahon, Jr., Frederick C. Harris, Jr. 2012. 'The Demeter Framework for Model and Data Interoperability'. *Proceedings of the 2012 International Congress on Environmental Modelling and Software: Managing Resources of a Limited Planet: Pathways and Visions under Uncertainty*, R Seppelt, A.A. Voinov, S. Lange, D. Bankamp (Eds.). International Environmental Modelling and Software Society (iEMSs) Sixth Biennial Meeting, Leipzig, Germany.

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
- *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