

GIRI PRAKASH

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EDUCATION

- 2000 Memorial University of Newfoundland, Environmental Sciences, MS
- 2001 University of Calgary, Software Engineering (OOST) Diploma
- 1997 Tamil Nadu Agricultural University, Soil Science, MS
- 1995 Tamil Nadu Agricultural University, Agriculture, BSC

PROFESSIONAL EXPERIENCE

2015 – Current	Director, ARM Data Center, Oak Ridge National Laboratory
	Responsible for the facility-wide vision, end-to-end definition, research, development, and operational execution of the data services.
	Successfully managing seven functional leaders and three groups across three DOE National Laboratories.
	Responsible for leading the Architecture and Services Strategy Team leaders from distributed teams
	Responsible for the implementation of next-generation data workflow using leading-edge big data and computing architecture.
2020 – Current	Section Head, Earth System Informatics and Data Discovery Section, Oak Ridge National Laboratory
	Responsible for creating and implementing forward-looking vision for the section.
	Responsible in providing Earth science community with next-generation data and tools by developing world-leading data science and informatics capabilities.
2018 – 2020	Group Leader, Atmospheric Radiation Measurement (ARM) Data Science and Integration, Oak Ridge National Laboratory
	Provided cutting-edge data science and computing capabilities for atmospheric science, biodiversity, earth and environmental sciences.
	Developed technologies and tools that were leveraged by over eight scientific projects funded by DOE and USGS.
2011 – 2014 2009 – 2011 2004 – 2009 2002 – 2004	Senior research and development staff, Oak Ridge National Laboratory Research and development staff, Oak Ridge National Laboratory Research and development associate, Oak Ridge National Laboratory Post-masters research assistant, Oak Ridge National Laboratory

AFFILIATION

2020 Member of U.S. National Committee for USNC/CODATA

Currently serving four-year term for National Academies of Sciences, Engineering, and Medicine (NASEM), representing US National Committee (USNC) on International Science Council's Committee on Data (CODATA).

RECENT NEWS AND SYNERGETIC ACTIVITES

- Prakash invited to represent U.S on global scientific data committee <u>https://www.ornl.gov/news/prakash-invited-represent-us-global-scientific-data-committee</u>
- Representing Data Services Around the World: <u>https://www.arm.gov/news/facility/post/58267</u>
- From Antarctica to the Azores: An Atmosphere's Worth of Data with Giri Prakash: https://www.ornl.gov/blog/eesd-review/antarctica-azores-atmosphere-s-worth-data-giri-prakash
- ARM Data Center Moves Forward on Priorities in Fiscal Year 2019: https://www.arm.gov/news/facility/post/58276
- Invited keynote speaker, Big Data in Brazil: Data Science and Big Data Analytics Workshop, 2019: https://www.arm.gov/news/facility/post/60941
- Session leader for "Data Centers from around the World Sharing Best Practices," CODATA, 2019, Beijing
- Session Leader for "data interoperability between disparate data sources", 3rd Polar Data Forum, 2019, Helsinki
- Invited talk: "A Modern Data Center Architecture to Enable Next Generation Data Science," SciData Conference, 2018, Botswana

SIGNIFICANT AWARDS AND PATENTS

- 2013 United States Copyright (Registration Number TXu 1-873-934) "Mercury-Metadata Data Management System" (June 18, 2013)
- 2008 NASA Earth Science Data Systems Peer-Recognition Software Reuse Award
- 2006 NASA Group Achievement Award for Best Customer Support Team

RECENT PUBLICATIONS

- 1. Giri Prakash, 2020, Core Trustworthy Data repositories, peer reviewed technical document published at https://www.coretrustseal.org/wp-content/uploads/2020/05/Atmospheric-Radiation-Measurement-ARM-Data-Center.pdf
- 2. R. Devarakonda, G. Prakash, K. Guntupally and J. Kumar, "Big Federal Data Centers Implementing FAIR Data Principles: ARM Data Center Example," 2019 IEEE International Conference on Big Data (Big Data), Los Angeles, CA, USA, 2019, pp. 6033-6036, doi: 10.1109/BigData47090.2019.9006051

- 3. R. Devarakonda, G. Prakash, et al., "Next-gen tools for big scientific data: ARM data center example," 2016 IEEE International Conference on Big Data (Big Data), Washington DC, 2017, pp. 3968–3970. doi: 10.1109/BigData.2016.7841078
- 4. G. Prakash, J. Kumar, E. Rush, R. Records, A. Clodfelter, J. Voyles, "HPC infrastructure to support the next-generation ARM facility data operations," 2016 IEEE International Conference on Big Data (Big Data), Washington DC, 2016, pp. 4026–4028. doi: 10.1109/BigData.2016.7841098
- 5. G. Prakash, B. Shrestha, K. Younkin, R. Jundt, M. Martin, J. Elliott, "Data always getting bigger—A scalable DOI architecture for big and expanding scientific data," *Data* 2016, *1*: 11