

Giriprakash Palanisamy

Senior Informatics Analyst

CCSI Data Integration, Dissemination, and Informatics Research Theme Lead

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Education and Training

- 2001 University of Calgary, Canada, Diploma in Object Oriented Software Technology
2000 (OOST)
Memorial University (St. John's, Newfoundland, Canada), Environmental Science, MS
1997 Tamil Nadu Agricultural University (Coimbatore, India), Soil Science, MS
1995 Tamil Nadu Agricultural University (Coimbatore, India), Agriculture, BS

Research and Professional Experience

- 2002-Present Current Senior Informatics Analyst, Environmental Sciences Division, Oak Ridge National Laboratory. As Systems Engineer - Atmospheric Radiation Measurement (ARM) Archive. Work includes a wide range of programming and system design/development responsibilities, including: coordinating the metadata development at the ARM Archive; design and implementation of ARM Large Scale Data Processing Services (Big Data System); designing Data Citation policy for ARM datasets managing all the data ordering web interfaces; project Leader and Senior Systems Architect, USGS Core Science Metadata Clearinghouse. Work includes managing and design of tools for the USGS Core Science metadata program, operation of the North American mirror for the Global Biological Information Facility (GBIF), and for managing all aspects of the harvest and indexing of the metadata in the Clearinghouse, and for managing the USGS metadata web services registry and thesaurus services. As Technical Leader and Senior Systems Architect, Mercury Metadata tool suite - Work includes all aspects of application design for various Mercury user interfaces and supervising the work of two developers. Mercury currently supports 15 projects funded by DOE, NASA and USGS.
As Systems Engineer, ORNL Distributed Active Archive Center (1/08-09/09) - Work included overall responsibility for the systems operations of the DAAC. As Applications Architect and Lead Developer in NSF funded DataOne project - involved in the Cyber Infrastructure Development for DataOne; setting up DataOne member node for DAAC and USGS. Member in various data interoperability, metadata and data standards working groups
- 2002-2004 Postmasters Research Associate. Environmental Sciences Division, Oak Ridge National Laboratory.
- 2001-2002 Internet Applications Developer. Critical Mass, Calgary, Canada. Created and modified "Build Your Own Mercedes Benz" 2002 model for Mercedes Benz U.S.A. Ltd. Website (<http://www.mbusa.com>), using java, EJB, Weblogic server; created new Build Your Own interfaces for 2003 Mercedes models using XML data; created Marketing Portal Demo for mbusa.com, using java, EJB, Weblogic server; carried out online data comparison using Oracle/SQL for Mercedes 2001 models; designed and developed Intranet application for Resource Allocation Request.
- 1998-2000 Graduate Research Assistant. Memorial University of Newfoundland, Canada. Identified environmental problems due to landfill contamination; prepared project proposals for research grant; analyzed environmental samples and developed computer models for metal transport in contaminated soils as well as involved in preparing lab reports and project reports.
- 2000 Conference Organization Assistant. Memorial University of Newfoundland, Canada.

- 1999 and 2000 Arranged media contacts, instruments setup, and field trips.
Teaching Assistant. Memorial University of Newfoundland, Canada. Carried out lab demonstration and paper evaluation as well as arranged field trips.
- 1997-1998 Senior Researcher. Tamil Nadu Agricultural University, India. Identified potential environmental problems and prepared project proposals; interpreted satellite imagery (visual and digital); used GIS for environmental applications; mapped satellite images and submitted project reports.
Junior Researcher. Tamil Nadu Agricultural University, India. Carried out research in remote sensing applications; wrote project reports and scientific articles related to remote sensing and soil science.

Publications

1. R. Devarakonda, G. Palanisamy, J. Green, and B. Wilson. 2010. Mercury: reusable metadata management, data discovery and access system; *Earth Science Informatics* 3(1-2): 87-94. doi: 10.1007/s12145-010-0050-7
2. Yilmaz, Pelin, Kottmann, Renzo, Field, Dawn, Knight, San Gil, Inigo, Palanisamy, Giriprakash and 43 co-authors. 2010. The “Minimum Information about an Environmental Sequence” (MIENS) specification. Available from *Nature Proceedings*. doi.org/10.1038/npre.2010.5252.2
3. R. McCord, G. Palanisamy, K. Gibson, C. Lenhardt, and S. Moore. 2009. Data Extraction from the ACRF Archive: More Progress Toward Customized Data Delivery for the Users. *19th Annual ARM Science Team Meeting*. 121
4. G. Palanisamy, B. Wilson, J. Green, and R. Devarakonda. 2008. Mercury- A Distributed Metadata Management, Data Discovery and Access System. *Proceedings of the Environmental Information Management Conference*. 119-124.
5. Palanisamy, G., McCord, R., Horwedel, B., Cederwall, R., Kaiser, D., Moore, S., McCoy, R., Klein, S., and Xie, S. 2008. Using Statistical Views of Measurements to Guide ARM Data Discovery and Access. (Poster) *Eighteenth Atmospheric Radiation Measurements (ARM) Science Team Meeting*, March 10-14 (2008), Norfolk, Virginia.
6. McCord, R. A., Lenhardt, C. W., Palanisamy, G. Statistical Views from Deep Archives to Support Data Discovery: Learning from the Atmospheric Radiation Measurement Archive Experience. (Presentation) *Scientific Information for Society from Today to the Future*. 21st International CODATA Conference, October 5-8, (2008) Kyiv, Ukraine.
7. McCoy, R., Xie, S., Klein, S., Clothiaux, E., Long, C., Turner, D., Johnson, K., Jensen, M., Shi, Y., Cederwall, R., McCord, R., Palanisamy, G., and Horwedel, B. Climate Modeling Best Estimate Dataset (CMBE) (Poster) *Eighteenth Atmospheric Radiation Measurements (ARM) Science Team Meeting*, March 10-14 (2008), Norfolk, Virginia.

Synergistic Activities

1. ARM Science Team Meeting (March 2004) in Albuquerque, New Mexico.
2. ARM Science Team Meeting (April 2003) in Broomfield, Colorado.
3. MapServer User Group Meeting 2003 (June) in St. Paul, Minnesota.
4. 27th International Symposium on Remote Sensing of Environment (June 1998) in Tromso, Norway.
5. 2nd International Conference on Contaminants in the Soil Environment in the Australasia-Pacific region (December 1999) in New Delhi, India.
6. Participated in the workshop on Remote Sensing and Geographic Information System Techniques conducted by District Rural Development Agency Vellore – 9 on September 29 at Vellore, Tamil Nadu, India.

Recent Awards and Recognition

1. Received Best Poster Award (2011), ASR Science Team Meeting (Author)

2. NASA ESDS Peer-Recognition Software Reuse Award (2008, for the Mercury Team)
3. NASA's Group Achievement Award for Best Customer Support Team (2006)
4. Received Best Poster Award (2007), ARM Science Team Meeting (Co-Author)