

SURESH K.S. VANNAN

Oak Ridge National Laboratory (ORNL)
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PROFILE

- Manager and science team lead, ORNL DAAC
- GIS Facility Manager, Environmental Sciences Division, ORNL
- Research Staff, Environmental Sciences Division (ESD), Climate Change Science Institute (CCSI), Oak Ridge National Laboratory (ORNL)
- Geographical Information Systems (GIS) analyst and Informatics specialist
- Advisory board Member, NASA Earth Data Coherent Web Project

EDUCATION

Master of Business Administration , University of Tennessee, USA	2012 - 2013
Master of Science - Meteorology , University of Maryland, USA	2001 - 2003
Bachelor of Engineering - Geoinformatics , Anna University, India	1997 - 2001

PROFESSIONAL EXPERIENCE

Research staff, Oak Ridge National Laboratory (ORNL) 2006 - Present
Oak Ridge, TN, USA

Job Functions

- Manage tasks, staffing, finance, and reporting for NASA funded terrestrial ecology data center (ORNL DAAC <http://daac.ornl.gov>)
- Develop short and long-term plan, strategy, and implementation for the ORNL DAAC data center
- Research and develop technologies for improved data dissemination
- Research data and informatics solutions to facilitate environmental, climate, and renewable energy science

Key Accomplishments

- ORNL lead on NASA technology infusion research project in collaboration with two other NASA data centers
- Successfully took over the ESD GIS facility operations. Established new procedures for managing licenses and GIS technology support for over 25 researchers
- Contributed towards successfully obtaining additional funding from NASA over the last 5 years for data distribution activities
- Distinguished contributor (top 10% of 4600 staff) in 2006
- Created tools and methodologies for long-term data preservation

Post Masters Research Associate, ORNL 2005 - 2006
Oak Ridge, TN, USA

- Performed GIS data quality checks
- Developed web mapping solutions for distribution of environmental and ecological data

- Participated as an invited US scientist to an India-US bilateral workshop aimed to develop a blueprint for a long-term environmental and climate monitoring network in India

**Faculty Research Assistant, University of Maryland
College Park, MD, USA**

2003 - 2005

- Administered web mapping solutions for visualization and dissemination of forest fire data derived from remote sensing satellites
- Installed a satellite based forest fire monitoring system onsite at Pretoria, South Africa
- Participated in several international scientific activities (e.g. deforestation studies in Africa, environmental impact of oil exploration in Gabon)

AWARDS AND HONORS

- Team member for ingest ORNL DAAC redesign award (2012)
- ORNL Significant Event Award for a data archive redesign project (2008)
- NASA award for outstanding customer service ratings for the ORNL DAAC (2005)

TECHNICAL SKILLS

- Experience with project management tools such as Agile development, Redmine
- Advanced knowledge of several Geographical Information Systems (GIS) software
- Well versed in programming languages such as Perl, JavaScript, HTML, PHP, Perl, C and database administration tools such as MySQL, PostgreSQL

SELECTED PRESENTATIONS

EuroSpec, Data management practices, **Invited Keynote Speaker**, June 2012

American Geophysical Union (AGU) Fall Meeting, San Francisco, California. Increasing the availability and usability of terrestrial ecology data through geospatial Web services and visualization tools. **Invited Speaker**, December 2010

Ecological Society of America (ESA) annual meeting, **Speaker, Co-organizer** for several workshops on data tools and data management best practices. August 2010, 2011

The American Museum of Science and Energy, Oak Ridge, TN. Introduction to Remote Sensing concepts to **public audience**. July 2007

Workshop on establishing the IndoFlux network, Chennai, India. Data Management Considerations for IndoFlux. **Invited Speaker**, July 2006

SELECTED PUBLICATIONS

S.K. Santhana Vannan, R.B. Cook, J.Y. Pan, B.E. Wilson. A SOAP Web Service for accessing MODIS land product subsets (2011). Earth Science Informatics. DOI:10.1007/s12145-011-0079-2

S.K. Santhana Vannan, R.B. Cook, S.K. Holladay, L.M. Olsen, U. Dadi, B.E. Wilson. A Web-Based Subsetting Service for Regional Scale MODIS Land Products (2010). IEEE JSTARS, 2(4): 319–328

P.V Sundareshwar et al., **S. K. Santhana Vannan**, Environmental Monitoring Network for India (2007). **Science**, 316(5822): 204-205