

Giriprakash Palanisamy

Computer Skills

Programming Languages:	Java, Enterprise Java Beans, .NET, C Sharp, Visual Basic 6.0, C++, Visual C ⁺⁺ , IDL
Scripting Languages:	JavaScript, Perl, VBScript, MapScript
Internet/Intranet Tools:	Servlets, JSP, STRUTS, XML, HTML, DHTML, ASP, CORBA, COM, RMI, and CGI
Application servers:	Tomcat, Weblogic, JRun, HP App server
Web Servers:	Apache, IIS, Java Web Services
Web Map Servers:	Mapserver 4.0 / Maplet, JBox
Database:	Oracle, Sybase, SQL/Plus. PL/SQL, Forms 2000, Microsoft Access
Operating Systems:	Windows XP, UNIX Solaris, NT/2000, MS-DOS
Others:	UML, Rational Rose, Active X, MS Project, Lotus Suite, JBuilder, JCreator, Visual café, Home Site, Dream Weaver, JRun.

Environmental/Remote Sensing Skills

More than 5 years experience in environmental research, education and technical assistance. Specific skills include:

- Proficient in environmental problem identification, project proposal preparation
- Soil/watershed resource mapping using remote sensing/GIS techniques, report writing and presentation
- Experience in field work, sampling methods, waste characterization and classification, and record keeping
- Soil and water sampling, soil processing for laboratory analysis
- soil/water analysis (metals and organic compounds, physical / mechanical properties, chemical properties and more)
- Knowledge in various soil remediation and their engineering design, performance evaluation and limitation

Academic Details

October 00 - April 01	<i>Diploma in Object Oriented Software Technology (OOST)</i> The University of Calgary, Calgary, Alberta, Canada
Sept 1998 - Sept 2000	<i>Masters of Science (Environmental Science)</i> Memorial University, St. John's, Newfoundland, Canada

- July 1995 - July 1997 **Masters of Science (Soil Science)**
TamilNadu Agricultural. University, Coimbatore, **India**
- June 1990 – April 1995 **Bachelor of Science (Agriculture)**
TamilNadu Agricultural. University, Coimbatore, **India**

Work History

- April 04 – Present Position: Research Staff, ESD, ORNL
- June 02 – April 04 Position: **Postmasters Research Associate (Software/Interface Design & Development)** (Java, JSP, Servlets, Perl, Sybase, MapServer & IDL)
- Organization: Environmental Science Division, Oak Ridge National Laboratory, TN, USA

Achievements/Responsibilities:

Project: ARM

- Designed, Developed and maintaining new web user interface for browsing and ordering Atmospheric Radiation Measurement Data (<http://www.archive.arm.gov/cgi-bin/arm-archive> login and click browser interface)
- Designed, developed and maintaining Data Quality Report (DQR) Generator application, which generates DQRs as a batch mode and also sends DQR files to the user FTP area
- Developing Quick looks for all the current ARM data files using IDL, designed and developed quick look template generator
- Designing and developing Thumbnail browser interface. This will facilitate the user to select and order files based on the quick look graphs of the data
- Created dynamic links for various instruments pages from the existing data browsing interface

Project: DAAC

- Designed, developed and maintaining the following Web Mapserver applications
 - FLUXNET (<http://fluxnetmap.daac.ornl.gov/mapserv/fluxnet>)
 - MODIS (<http://modismap.daac.ornl.gov/mapserv/modis/>) and
 - NPP (<http://nppmap.daac.ornl.gov/mapserv/npp/>)
- Designing and developing many mercury search instances (I3N, ORNLDAAC, LBA, NBII ..) using JSP and java

Languages Tools and Used:

- Java, Perl, Servlets, JSP, Tomcat, Apache, Java Scripts, Sybase, SQL/PLSQL, Unix, XML, Web MapServer, IDL, JBOX
- Tomcat and Apache and IIS Servers, Jcreator, Home Site, Visio

- Apr 01 – May 02 Position: **Internet Applications Developer** (Java, JSP, EJB, Servlets and Oracle)

Organization: Critical Mass, Calgary, CANADA

Achievements/Responsibilities:

- Created/modified Build Your Own Mercedes Benz 2002 web page for Mercedes Benz USA Ltd web site (www.mbusa.com)
- Created Marketing Portal Demo for <http://mbusa.com>
- Carried out online data comparison using Oracle/SQL for Mercedes 2001 models.
- Developed Resource Allocation Request Forms and Resource Skills Information Input Forms for intranet application

Languages Tools and Used:

- Java, EJB, Servlets, JSP, Weblogic, DHTML, Java Scripts, Oracle (SQL/PLSQL), Unix
- JBuilder, Jcreator, Visual Café, Home Site, Dream Weaver, Visual InterDev, Visio, Rational Rose, Weblogic Application Server.

Sept 98 – Sept 00 Position: **Graduate Research Assistant/student** (Environmental)
Organization: Memorial University of Newfoundland, Canada

Achievements: 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.

May 2000 Position: **Conference Organization Assistant** (Science)
Organization: Memorial University of Newfoundland, Canada

Arranged Media contacts, instruments setup and field trips.

Jan 00 - Apr 00 & Position: **Teaching Assistant** (Science)
Sept 99 - Dec 99 Organization: Memorial University of Newfoundland, Canada

Carried out Lab Demonstration and paper evaluation as well as arranged field trips.

Aug 97 - Aug 98 Position: **Senior Researcher** (Remote Sensing)
Organization: Tamil Nadu Agricultural University, India

Identified potential environmental problems and prepared project proposals, interpreted **satellite imagery** (visual and digital) also used GIS for environmental applications, mapped satellite images and submitted project **reports**.

Achievements: Successfully surveyed/mapped watershed lands using remote sensing / GIS techniques.

June 96 - Apr 97 Position: **Junior Researcher** (Soil Science)
Organization: Tamil Nadu Agricultural University, India

Carried out research in remote sensing applications, written project reports and scientific articles related to remote sensing and soil science.

Achievements: successfully carried out a project 'Soil resource appraisal of Gudiyatham taluk, Pambar-Nagavathi Agram watershed, India using remote sensing techniques'

AWARDS / PRIZES / SCHOLARSHIPS OBTAINED

Awarded Post-Graduate Research Scholarship (JRF) 1996 by the Govt. of India through National Remote Sensing Agency (NRSA) for 'Soil Resource Appraisal and Land Evaluation in selected Watersheds of Tamil Nadu using Remote Sensing Technique for Integrated Mission for Sustainable Development"

Grants awarded by European Commission, JRC, Ispra, Italy for participating the 27th International symposium on Remote sensing of Environment (8 - 12 June 98) in Tromso, Norway.

Awarded Post-Graduate Research Scholarship by Public Works Govt. Services Canada and Memorial University for "Study of Heavy Metals in Soils of the Former United States Naval Base, Argentia, Newfoundland, Canada"

WORKSHOP / TRAINING PARTICIPATED

Participated in the workshop on Remote Sensing and Geographic Information System Techniques conducted by District Rural Development Agency Vellore - 9 on 29th September at Vellore, Tamil Nadu, India.

Participated in the 'Training cum workshop on soil resource assessment and developmental planning for the new millennium' conducted by Tamil Nadu Agril. University, National Bureau of Soil Science and Land Use Planning (**NBSS & LUP**) and Soil Conservation Service - **USDA**. (February 1998) at Tamil Nadu Agril. University, Coimbatore.

INTERNATIONAL WORKING GROUP MEETING PARTICIPATED

Working group meeting on Eurasian agriculture and Forestry (10th and 11th June 1998) in Tromso, Norway convened by European Commission, Joint Research Centre, Space Application Institute, Ispra, Italy.

SYMPOSIUM / CONFERENCES/MEETINGS PARTICIPATED

ARM Science Teem Meeting (March 2004) in Albuquerque, New Mexico, USA
ARM Science Teem Meeting (April 2003) in Broomfield, Colorado, USA
MapServer User Group Meeting 2003 (June 2003) in St. Paul, Minnesota, USA
27th International symposium on Remote Sensing of Environment (June 1998) in
Tromso, Norway.

2nd International Conference on contaminants in the Soil Environment in the
Australasia-Pacific region (December 1999) in New Delhi, India,

The 8th International Annual Congress of Post Graduate Institute of Agriculture
(November 1996) at University of Peradeniya, Sri Lanka.

National Symposium of Remote sensing for Natural Resources and Annual
Convention of Indian Society of Remote Sensing (December 1996) at University of Pune,
India.

National Seminar and Sixty-first Annual Convention of the Indian Society of Soil
Science (November 1996) at B.A.College of Agriculture, Anand, Gujarat, India.

National Symposium and Annual Convention of Indian Society of Remote
Sensing (November 1997) at NRSA, Hyderabad, India.

RECENT PUBLICATIONS

N.J.Gogan, R.S. Canning and **P.Giriprakash**. Heavy Metals in Soils at a Distributed Contaminated Site, 84th Canadian Society for Chemistry Conference and Exhibition, Montreal, PQ, May 2001.

Niall J. Gogan and **P. Giriprakash**. Heavy metal transport in soils at a contaminated site. CSC 2000, Canadian Society for Chemistry National Meeting, Calgary, Alberta, Canada, May 27-31, 2000

Giriprakash,P and Niall J. Gogan. Cadmium Sorption and Desorption in Soils of the Former US Naval Base, Argentia, Newfoundland, Canada. Abstracts of the 2nd International Conference on contaminants in the Soil Environment in the Australasia-Pacific region (12 – 17 December, 1999 held in New Delhi, India)pp:279-280

Giriprakash,P and S.natarajan. Remote sensing -A Tool for Soil Resource appraisal and sustainable agriculture. Proceedings of the 27th International symposium on Remote sensing of Environment (8-12 June 1998 held in Tromso, Norway) pp: 822-824

REPORTS

Involved in satellite data interpretation, soil analysis, soil resource map preparation for the following soil survey reports

- 1.Soil survey report of Pambar-Nagavathi Agram watershed, India-using remote sensing technique.
- 2.Soil survey report of Gundar watershed, India- using remote sensing technique.
- 3.Soil survey report of Kottakayar watershed, India- using remote sensing technique.
- 4.Soil survey report of Palar-Manimuthar watershed, India- using remote sensing technique.
- 5.Soil survey report of Vellar watershed, India using remote sensing technique.