

Digital Governance and Hotspot Geo-Informatics

Workshop Announcement

UNU-IIST, 10-11 January 2007

Prof. Ganapati P. Patil

Distinguished Professor and Director
Penn State Center for Statistical Ecology
and Environmental Statistics

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Background Geoinformatics for spatial and temporal hotspot detection and prioritization is a critical need for the 21st Century. A declared need is around for statistical geoinformatics and software infrastructure for spatial and spatiotemporal hotspot detection, prioritization, early warning, and sustainable management. A hotspot can mean an unusual phenomenon, anomaly, aberration, outbreak, elevated cluster, critical area. The declared need may be for monitoring, etiology, early warning, or management. The responsible factors may be natural, accidental, or intentional. The five year NSF DGP project has been instrumental to conceptualize hotspot geoinformatics partnership among several interested cross-disciplinary scientists in academia, agencies, and private sector around the world.

Applications Our efforts are driven by a wide variety of case studies of interest to agencies, academia, and private sector involving critical societal issues, such as public health, ecosystem health, ecohealth, biodiversity and threats to biodiversity, emerging infectious disease, water management and conservation, carbon sources and sinks, persistent poverty, environmental justice, crop pathogens, invasive species management, biosurveillance, biosecurity, disease biogeoinformatics, social networks, sensor networks, hospital networks and syndromic surveillance, video mining, early warning, tsunami inundation, remote sensing, and disaster management. Also space-time disease, poverty, pollution, object identification and tracking, early detection, early warning, hotspot trajectories and trends with examples of West Nile Virus, urban poverty patch dynamics, etc. The project emphasis is on development of geoinformatic hotspot system and its software. The system has two methodological components: hotspot detection and prioritization.

Workshop The emphasis of the proposed two day workshop is also on geoinformatics of hotspot detection and prioritization in a wide variety of subject areas and critical issues confronting agencies, academia, and industry. You are invited to participate in a manner most productive for your purposes, whether in methods, tools, and software, or in presentation of live case studies or in attendance in a timely, informative, and insightful workshop. You have the benefit of a veteran crossdisciplinary scientist as perceptive expositor, workshop leader, and editor of resulting publications. And of course, an opportunity to strengthen, advance, and accelerate your in-house research and work plan involving geoinformatics and hotspot dynamics.

The proposed instructional part will provide up-to-date exposition with live examples and illustrations. The proposed workshop part will discuss case studies with emphasis on the methodology and software available.

For general information on digital governance and hotspot geoinformatics, please see <http://www.stat.psu.edu/hotspots>.

The workshop is organized in collaboration with the UNeGov.net initiative of UNU-IIST.

Program	time	10 January	11 January
	09:30 - 11:00	Geoinformatics of Hotspot Detection	Geoinformatics of Hotspot Prioritization
	11:00 - 11:30	Break	Break
	11:30 - 13:00	Geoinformatics of Hotspot Detection	Geoinformatics of Hotspot Prioritization
	13:00 - 14:30	Lunch	Lunch
	14:30 - 16:00	Geoinformatics of Hotspot Detection	Geoinformatics of Hotspot Prioritization
	16:00 - 16:30	Break	Break
	16:30 - 18:00	Detection Software - Demo	Prioritization Software - Demo

Speakers Ganapati P. Patil is a Distinguished Professor and Director of the Penn State Center for Statistical Ecology and Environmental Statistics, the Principal Investigator of the NSF Digital Government Research Project for Hotspot GeoInformatics and Former Visiting Professor of the Harvard School of Public Health. Prof. Patil is also the Editor-in-Chief of Environmental and Ecological Statistics, and the Fellow of ASA, IMS, AAAS, RSS, ISI, IISA, NIE and DSEA. He can be contacted by email at gpp@stat.psu.edu.

Dr. Sharadchandra Joshi is the chair of the Computer Science program at the Slippery Rock University of Pennsylvania. He holds the PhD in Statistics from the Penn State University, and is the co-investigator of the NSF Digital Government Geoinformatics Research Project.

Registration Registration requests and general enquiries should be sent by email to Rilwan Basanya and copied to Tomasz Janowski. Early registration is strongly advised!

