

Naresh Pai

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EDUCATION & TRAINING

PhD Student, emphasis in Hydrologic modeling, GIS and Remote Sensing. Department of Biological and Agricultural Engineering, University of Arkansas, Fayetteville, AR. *Current GPA - 4.0*

Master of Science in Mechanical Engineering, 2007, emphasis in Dynamics, Systems & Controls

Master of Science in Agricultural and Biological Engineering, 2007, emphasis in Control System Application, University of Florida, Gainesville, FL. *GPA - 3.56*

Bachelor of Engineering in Mechanical Engineering, Manipal Institute of Technology, India

Professional Development Courses

ESRI certified courses in ArcGIS Desktop and Spatial Analyst, Soil and Water Assessment Tool (SWAT) hydrological modeling basic and advanced workshops, Active member on SWAT & Matlab user-group, Graduate student professional learning series seminars

PROFESSIONAL EXPERIENCES

University of Arkansas • Aug 2007 – Present

Senior Graduate Assistant

- Hydrological computer modeling of watersheds to assess water quality and quantity
- Applying spatial/remote sensing methods for natural resource management

Selected Achievements

- Received the GeoEye imagery grant to assess the water quality of Beaver Lake, Arkansas.
- Presented research results at the Arkansas Chapter of ASABE and Arkansas Water Resource Association (AWRC) annual meeting.

University of Florida • Jan 2005-May 2007

Graduate Research Assistant

- Designed and developed a control system for an orchard sprayer using a real-time remote sensor.
- Assisted in maintaining other sensors, developing expert systems.

Selected Achievements

- Research resulted in submission of 2 poster presentations, 1 technical abstract and 1 peer-reviewed paper.

PUBLICATIONS

Peer Reviewed

Pai, N., M. Salyani, and R. D. Sweeb. Regulating airflow of orchard airblast sprayer based on tree foliage density. *Trans. ASABE*. 52(5): 1423 - 1428

Conferences

Saraswat, D., and **N. Pai**. 2009. Development and evaluation of an algorithm for generating field based output from SWAT. Oral presentation at the 2009 5th International SWAT Conference. University of Colorado, Boulder, CO. August 5 – 7, 2009.

Saraswat, D., and **N. Pai**. 2009. Developing inventory of riparian buffer cover in L'Anguille River watershed

using geospatial technologies. ASABE Paper No. 097060. St. Joseph, MI: ASABE

Saraswat, D., and **N. Pai**. 2009. Inventorying existing riparian buffer cover in L'Anguille River watershed using geospatial technologies. Oral presentation at the ASPRS 2009 Annual Conference. Baltimore, MD. March 09 – 13, 2009.

Pai, N., M. Salyani, and R. D. Sweeb. 2008. Adjusting airblast sprayer airflow based on tree foliage density. ASABE Paper No. 083653. St. Joseph, MI: ASABE

Salyani, M., H. Zhu, W. C. Hoffman, R. D. Sweeb, and **N. Pai**. 2008. Quantitative assessment of spray deposition with water-sensitive paper. ASABE Paper No. 083895. St. Joseph, MI: ASABE

Saraswat, D., **N. Pai** and P. Tacker. 2008. Identifying priority sub-watersheds: A case study. In Arkansas Non Point Source Task Force Meeting. Little Rock, AR, September 16.

Saraswat, D., P. Tacker and **N. Pai**. 2008. Identifying hotspots in L'Anguille watershed using modeling approach. Paper accepted for Oral Presentation in 9th International Conference in Precision Agriculture, July 20-23, Denver, Colorado.

Saraswat, D., D. Traywick and **N. Pai**. 2008. Geospatial analysis for source identification- Riparian buffer. In Arkansas Non Point Source Task Force Meeting. Little Rock, AR, September 16.

Posters

Pai, N. Geospatial approach for streambank delineation for inventorying riparian buffer zone. *Poster presented at the University of Arkansas', GIS Day Open House*. Fayetteville, AR. November, 2008

Pai, N., D. Saraswat, and P. Tacker. Prioritizing non point source subwatersheds using simulation modeling and cartographic approach. *Poster presented at the 45th Meeting of Arkansas Section of the American Society for Agricultural and Biological Engineers*. Little Rock, AR. October, 2008.

Pai, N., and D. Saraswat. Modeling L'Anguille river watershed using SWAT. *Poster presented at the Annual Conference of the Arkansas Water Resources Association*. Fayetteville, AR. April 22, 2008.

Pai, N., M. Salyani, and R. D. Sweeb. Controlling airblast sprayer air for variable rate applications in orchards. *Poster presented at the 44th Meeting of Arkansas Section of the American Society for Agricultural and Biological Engineers*. Little Rock, AR. October, 2007.

Technical Report

Saraswat, D., P. Tacker, and **N. Pai**. 2008. Watershed Response Modeling (WARM) for 12-digit Hydrologic Unit Code "HUC" in L'Anguille River Watershed. Little Rock, AR: Arkansas Natural Resources Commission. Project # 04-121.

Book Review

Pai, N. (Ed.), B. Yang., J. Kaplan, J. Sisskind, L. Wedding, M. Leh, M. Graham, **N. Pai**, and T. Kalayci (Reviewers). 2009. Manual of Geographic Information Systems. Marguerite Madden (Ed.). American Society of Photogrammetry and Remote Sensing. *Photogrammetric Engineering & Remote Sensing*. 75(11): 1263-1266

AWARDS/GRANTS

Outstanding Ph.D. student for 2009 (Dept. of Biological and Agricultural Eng., Univ. of Arkansas)

GeoEye Foundation Imagery Grant in-kind (\$ 24,150) for the project "Application of IKONOS-2 and Landsat satellite imagery to assess water quality of Beaver Lake, Arkansas"

First place award for a poster presented at 2007 annual meeting of Arkansas section of ASABE, Little Rock

PROFESSIONAL AFFILIATIONS/HONOR SOCIETIES

- Communication Councilor, ASPRS Student Advisory Committee (SAC; 2009-2010)
- Phi Kappa Phi (Collegiate Honor Society; 2008 onwards)
- Member, ASPRS (American Society for Photogrammetry and Remote Sensing; 2008 onwards)
- Member, ASABE (American Society of Agricultural and Biological Engineers; 2007 onwards)