



IEEE NEWS FOR FEBRUARY 2008

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Rochester IEEE home page at: <http://www.r1.ieee.org/~roch>

(Always check the web PDF edition for late changes and additions)

Rochester Section Meeting Tuesday, February 5, 2008

The next Rochester Section business meeting is on Tuesday, February 5, 2008 at Noon, at the Shanghai Restaurant, 2920 West Henrietta Road, just south of the intersection with Brighton-Henrietta Town Line Road. All IEEE members are welcome to attend this meeting, meet your officers and have lunch for just \$3.00.

Engineering in Medicine and Biology Society Chapter Officers for 2008

Chair - Dan Phillips, Rochester Institute of Technology

Vice-chair - Maria Helguera, Rochester Institute of Technology

Communications and Aerospace Societies Joint Chapter Officers for 2008

Co-Chairs - Mitel Kuliner (Harris RF) and Nirmala Shenoy (RIT)

Vice-Chairs - Sumita Mishra (RIT) and Yin Pan (RIT)

Secretary - Azadeh Vosoughi (UofR)

Treasurer - Vishal Anand (SUNY Brockport)

Computer Society Chapter Officers for 2008

Chair - James Heliotis (Rochester Institute of Technology)

Vice-Chair - Howard Brill (The Monroe Plan For Medical Care)

GOLD Affinity Group Officers for 2008

The Graduates of the Last Decade (GOLD) affinity group officer for 2008 are:

Chair - Hua Liu (Xerox)

Vice Chair - Dhireesha Kudithpudi (RIT)

Activity Coordinator - Feixia Yu (Kodak)

Web Master - Jonathan Owen

LEOS Chapter Officers for 2008

Co-chairs - Sean Garner, (Corning Inc.) and Carlo Kosik Williams (Corning Inc.)

Signal Processing Society Chapter Officers for 2008

Chair - John Handley (Xerox)

Vice Chair - Vishal Monga (Xerox)

Secretary - Andrew Gallagher (Kodak)

Treasurer - David Coumou (D3 Engineering)

Western New York Geoscience and Remote Sensing Society

Chair - John Kerekes (RIT)

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Signal Processing Society Meeting February 6

Topic: Estimation for Color Engineering: Adaptive Neighborhoods and Regularized Local Linear Regression

Speaker: Prof. Maya Gupta, The University of Washington

Date: Wednesday, February 6th, 2008

Location: The Laboratory for Laser Energetics Auditorium - 240 East River Road, Rochester, NY 14623

Time: 6:30-7:00 PM Pizza and Socializing, 7:00-8:00 PM Technical Presentation

SPS Announcements + Venue Map: <http://ewh.ieee.org/r1/rochester/sp/location.html>

RSVP: to Vishal Monga for pizza count. Email: vishal.monga@xeroxlabs.com

Abstract: Two problems in color engineering are reproducing color accurately between devices, and enhancing color images and video. We show how both problems can be phrased as estimation problems, where the goal is to estimate the color space transformation that best fits given sample pairs of input and output colors. Local linear regression has been shown to be an effective regression method for these problems. A key problem for all local learning methods is how to define "local." We show that using a new adaptive neighborhood definition with local linear regression has bounded estimation variance, produces better experimental results, and requires no training/cross-validation. In addition, we show how different regularizations can improve local linear regression, and propose a new multi-resolution approach to regularized local linear regression. Experimental results will be shown for color management, color image enhancement, and gamut expansion.

Speaker Biography: Maya Gupta completed her Ph.D. in Electrical Engineering in 2003 at Stanford University as a National Science Foundation Graduate Fellow, where she worked with Robert Gray and Richard Olshen.

She did her BS in Electrical Engineering and a BA in Economics at Rice University, 1994-1997. From 1999-2003 she worked for Ricoh's California Research Center as a color image processing research engineer. In the fall of 2003, she joined the EE faculty of the University of Washington as an Assistant Professor. She was awarded the 2007 Office of Naval Research Young Investigator Award and the 2007 University of Washington Department of Electrical Engineering Outstanding Teaching Award. More information about her research is available at her group's webpage: idl.ee.washington.edu.