



WORKSHOP ON COMPUTATIONAL VISION AND IMAGE ANALYSIS

The goal of the Computational Sciences Lecture Series (CSLS) is to bring together researchers

from mathematics (pure and applied), computer science, and engineering to promote cross-fertilization between these fields and to establish computational science as an active research discipline at UW-Madison. The CSLS will consist of several half-day meetings during each year, each meeting consisting of three lectures by distinguished researchers, grouped around a common theme.

The first meeting in this series will focus on Computational Vision and Image Analysis. Great advances have been made in the acquisition of image data, from conventional photography, CT scanning, and satellite imaging to the now ubiquitous digital cameras embedded in cell phones and other wireless devices. Although the semantic understanding of the shapes and other objects appearing in images is effortless for human beings, the corresponding problem in machine perception — namely, automatic interpretation via computer programs — remains a major open challenge in modern science. In fact, there are very few systems whose value derives from the analysis rather than collection of image data, and this "semantic gap" impedes scientific and technological advances in many areas, including automated medical diagnosis, robotics, industrial automation, and effective security and surveillance.

In this CSLS Workshop, three distinguished experts in the field of Computational Vision and Image Analysis share their thoughts on the current state of the art and future directions in the field.

Read more on the web: www.engr.wisc.edu/CSLS

2:30PM-3:30PM

*Hierarchical Designs for
Pattern Recognition*

Professor Donald Geman

Department of Applied Mathematics
and Statistics and Center for
Imaging Science, Johns Hopkins
University

3:45PM-4:45PM

*Modeling and Inference of
Dynamic Visual Processes*

Professor Stefano Soatto

Department of Computer Science
University of California, Los Angeles

5:00PM-6:00PM

*Computational Anatomy and
Models for Image Analysis*

Professor Michael Miller

Director of the Center for Imaging
Science; The Seder Professor of
Biomedical Engineering; Professor of
Electrical and Computer Engineering
Johns Hopkins University

2:30 PM - 6:00 PM

Thursday, October 30th, 2003

1610 Engineering Hall
(1415 Engineering Drive)