

# The University of Chicago

Department of Statistics

## Seminar

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### “Coarse to Fine Models for Scene Analysis”

Monday, October 7, 2002 at 4:00 PM  
133 Eckhart Hall, 5734 S. University Avenue

### ABSTRACT

I will describe an approach to reading character sequences in cluttered environments where segmentation does not seem to be an option. A comprehensive and intractable Bayesian model for the data is defined, involving complex priors on the arrangement of the characters, complex data models of the image given the character poses etc. A sequence of coarse to fine approximations is then described each of which can be very efficiently maximized to obtain a small number of candidate solutions. At the final stage the prior is brought in to help sort out among a few candidate interpretations. Training involves very simple estimates of probabilities of local features.

I will illustrate the algorithm in the context of reading license plates.