

MINI-WORKSHOP ANNOUNCEMENT
Department of Statistics

**Generative Models for Handwritten Digit Recognition
in the Presence of Noise**

by

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ABSTRACT

Recognition of handwritten digits is a well-studied problem in pattern recognition. State of the art approaches, from both machine learning and statistical modeling perspectives, have achieved nearly perfect performance under limited circumstances, but several problems remain to be addressed. In particular, extremely large datasets are required for parameter estimation in most models, and performance on noisy test data -- like one might observe on a fax or photocopy -- degrades dramatically. We contrast the machine learning and statistical modeling approaches, and propose the use of statistical models and features that encode local structure to address these issues.