Review of

Continuous Speech Recognition Using Support Vector Machines

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Submitted to Computer Speech and Language

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This paper is about the application of the powerful pattern classification
approach of Support Vector Machines (SVM) to speech recognition. It has a
basic introductory section, a lengthy section on the basics of SVMs with
some examples, a section on adapting the classifier design to deliver
probability estimates that can be integrated with HMMs and an experimental
results section.

I so not think the paper is acceptable for publication in CSL for the
following reasons:

a) The novelty of material is low and is restricted to simple
   application of a widely known pattern classification method
   to the speech context. The important part of the process
   is to tweak the SVM outputs to be estimates of probabilities.
   This part of the paper is not a thorough investigation of
   different possible ways of achieving it. The experiments, too,
   are not that strong - a static vowels classification task
   and a isolated digits task. Thus on the novelty front the
   paper doesn't score well either on the theoretical / algorithmic
   side, or on the scle of the applications side.

b) The balance in material is weak. Section 2 is a lengthy exposition
   of material already available widely. It may be argued that this is
   new to the Speech community, but I think speech researchers regularly
   read Machine Learning literature where they will find Section 2 in
   greater depth and thoroughly reviewed in tutorial articles.

c) Section 3, where the approaches to massaging SVM outputs to integrate
   with HMMs is not written well. Ad Hoc approaches of other researchers
   are not reviewed thoroughly, nor are the particular decisions of
   authors of this manuscript well justified; e.g. the equal variance
   assumption leading to Eqn (34) - why should having large amounts
   of data lead to equal variance posteriors?

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