Subject: 1D vector pattern classification tips
Posted by Russ Welti on Tue, 12 Sep 1995 07:00:00 GMT
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Just casting a line to see if anyone could direct me
to information (or pub domain software!) regarding
classification of 1D vectors (i.e. spectra, chromatograms)
into clusters.

In my case, I cannot know ahead of time what the
prototype example of each category will be, nor the
exact number of categories, but the data being
categorized is pretty simple: 1D vectors with
~I50 elements/pixels which represent preprocessed,
time-sampled intensity values from a DNA sequencer.
The plot looks like 3 to 10 distinct peaks with a nice
background level near zero.

The features here are also relatively straightforward:
number of peaks, their locations and intensities, etc.

I am told that cross_correlation is of limited value here,
due to the fact that one pattern can look just like another,
only offset by some unknown distance.

I am doing Web and bibliography searches on clustering
algorithms, with limited success. I'm afraid I need
something a bit below the level of the average thesis ;)

Has anyone done any of this before or have a good
pointer they could offer? A favorite textbook? A web page?

much thanks, as always,

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