
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 ~150 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,

Russ Welti

University of Washington
Molecular Biotechnology
PO Box 352145
Seattle, WA 98195
rwelti@u.washington.edu

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