Subject: Re: slow processing of my k-nearest neighour code
Posted by btt on Mon, 14 Aug 2006 16:01:04 GMT
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Wayne Landsman wrote:
> Karl Schultz wrote:
>> On Mon, 14 Aug 2006 10:11:30 -0400, Ben Tupper wrote:
>>
>>> humphreymurray@gmail.com wrote:
>>>
>>>> > ; Calculate the squared distance for each attribute.
>>>> > squared = make_array(num_training_elements, num_attributes)
>>>> > for attrib = 0, num_attributes-1 do begin
>>>> > squared[*,attrib] = (testing_data[i, attrib] -
>>>> > training_data[*,attrib])^2
>>>> > endfor
>>>> >
>>> Hi,
>>>
>>> You might try replacing the above for inner-loop with the following
>>>
>>> squared = (testing_data - training_data)^2
>>>
>
> I don't think this works here because you lose the dependence on the i
> index -- the value of "squared" will differ for each value of "i".
> But another one of David Fanning's pages could help, see
> http://www.dfanning.com/code_tips/asterisk.html
> and rewrite the assignment as
>
> squared[0,attrib] = (testing_data[i, attrib] -
> training_data[*,attrib])^2
>

Ah! Got it. I didn't catch that squared was measuring the distance
from each test point to every training point for the specified
attribute. Duh! I guess that's the whole point!

Sorry for the misdirect.

Cheers,
Ben