Subject: does principle component=Factor analysis?
Posted by d.poreh on Thu, 27 Mar 2008 17:15:04 GMT
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HI folks
i am using principle component for some remotly sensed data
(classification). I hear we can do this by factor analysis too. does
anybody know this is a same thing or not?
thanks for any help in advance
Dave

Subject: Re: does principle component=Factor analysis?
Posted by David Fanning on Thu, 27 Mar 2008 20:39:45 GMT
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Jean H writes:

>> "Yeah, sorta."
>>
> Factor analysis is a statistical method used to explain variability
> among observed random variables in terms of fewer unobserved random
> variables called factors. The observed variables are modeled as linear
> combinations of the factors, plus "error" terms. The information gained
> about the interdependencies can be used later to reduce the set of
> variables in a dataset. Factor analysis originated in psychometrics, and
> is used in behavioral sciences, social sciences, marketing, product
> management, operations research, and other applied sciences that deal
> with large quantities of data.
>
> Factor analysis is often confused with principal components analysis.
> The two methods are related, but distinct, though factor analysis
> becomes essentially equivalent to principal components analysis if the
> "errors" in the factor analysis model are assumed to all have the same
> variance.
> http://en.wikipedia.org/wiki/Factor_analysis

With all due respect, Jean, I think Coyote comes to the point
a bit quicker. ;-)

Cheers,

David

--
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Sepore ma de ni thui. ("Perhaps thou speakest truth.")