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 View Forum Message <> Reply to Message

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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Coyote's Guide to IDL Programming: http://www.dfanning.com/

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

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