

Accepted Manuscript

Parameterized Principal Component Analysis

Ajay Gupta, Adrian Barbu

PII: S0031-3203(18)30026-8
DOI: [10.1016/j.patcog.2018.01.018](https://doi.org/10.1016/j.patcog.2018.01.018)
Reference: PR 6427

To appear in: *Pattern Recognition*

Received date: 16 September 2016
Revised date: 30 November 2017
Accepted date: 22 January 2018

Please cite this article as: Ajay Gupta, Adrian Barbu, Parameterized Principal Component Analysis, *Pattern Recognition* (2018), doi: [10.1016/j.patcog.2018.01.018](https://doi.org/10.1016/j.patcog.2018.01.018)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A method for manifold approximation where the low dimensional space is a PCA model with the mean and principal vectors modeled as smooth functions of a parameter that depends on the position on the manifold
- Generalizations where the manifold dimension is not constant
- Generalization where the dimensionality of the ambient space is not constant
- Comparison with PCA, Sparse PCA, and independent PCA models across the manifold, for simulated data, faces in the presence of in plane rotation and faces with different out of plane rotations.

Download English Version:

<https://daneshyari.com/en/article/6939228>

Download Persian Version:

<https://daneshyari.com/article/6939228>

[Daneshyari.com](https://daneshyari.com)