

### عنوان مقاله:

Face Recognition using an Affine Sparse Coding approach

## محل انتشار:

مجله هوش مصنوعی و داده کاوی, دوره 5, شماره 2 (سال: 1396)

تعداد صفحات اصل مقاله: 12

# نویسندگان:

M. Nikpour - Electrical and Computer Engineering Department, Babol Noushirvani University of Technology, Babol, .Iran

R. Karami - Electrical and Computer Engineering Department, Babol Noushirvani University of Technology, Babol,
.Iran

.R. Ghaderi - Nuclear Engineering, Shahid Beheshti University of Tehran, Tehran, Iran

#### خلاصه مقاله:

Sparse coding is an unsupervised method which learns a set of over-complete bases to represent data such as image and video. Sparse coding has increasing attraction for image classification applications in recent years. But in the cases where we have some similar images from different classes, such as face recognition applications, different images may be classified into the same class, and hence the classification performance may be decreased. In this paper, we propose an Affine Graph Regularized Sparse Coding approach for face recognition problem. Experiments on several well-known face datasets show that the proposed method can significantly improve the face classification accuracy. In addition, some experiments have been done to illustrate the robustness of the proposed method to noise.

The results show the superiority of the proposed method in comparison to some other methods in face classification

# كلمات كليدى:

Sparse coding, Manifold Learning, Face recognition, Graph Regularization

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/894126

