Abstract

In this paper, a new approach for estimation of eigenvalues of images is presented. The proposed approach is based on the Gerschgorin’s circles theorem. This approach is more efficient as there is no need of calculation of all real eigenvalues. It is also helpful for all type of images where the calculation of eigenvalues may be impractical. More importantly, anyone can
come to the conclusion by visual inspection as it is a graphical method. The estimation of
eigenvalues can be used to extract the important information of images for various applications.

Reference


Index Terms

Computer Science

Image Processing
**Key words**

Eigenvalues  Eigenspace  Gerschgorin’s theorem

SVD

Pattern recognition

Rayleigh quotient