



## **Eigenfaces for Recognition:**

## • Experiments:

- Database Face Images: Large amount of Images to train with varying lightning, scale and orientation.
- Real-Time recognition: Recognising faces in dynamic and unstructured environment.

## Relation to Neural Network:

- Biological Motivation: It seems plausible to build a Machine algorithm similar to human face recognition.
- Neural Networks: Eigenfaces Algo. (information processing model) can also be presented using simple parallel computing elements as in artificial neural network.
- Conclusion: Eigenfaces algorithm is not perfect but a lot accurate.





## Eigenfaces for Recognition

- What is an eigenface?
- Face space
- Face detection and recognition



Eigenfaces as seen in the paper "Eigenfaces for Recognition" by Matthew Turk and Alex Pentland.

Conditions for this approach to work