# Independent component analysis of skin color image.

# **Department of Information and Image Sciences**

1999

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#### **Abstract:**

The spatial distributions of melanin and hemoglobin in skin are separated by independent component analysis of skin color image. The independent component analysis(ICA) is a technique that extracts the original signals from mixtures of many independent sources without a prior information on the sources and the process of the mixture.

### **Advantages:**

It reduces the dimensions to avoid the problem of overfitting. It decomposes the mixed signal into its independent sources signals.

## **Disadvantages:**

Traditional Indepedent Component Analysis Algorithm leads to local minimum solution, and the suitable source signals are not isolated .But it is overcomed by artificial immune system.