Lung Cancer Detection using Curvelet Transform and Neural Network

Abstract

Throughout the world the common cause of death in humans is lung cancer. It is necessary to detect cancer as early as possible to increase the survival rate. Lung cancer in CT scan images can be classified easily and efficiently using digital image processing techniques. Curvelet transform can extract the features of lung cancer CT scan images proficiently. All extracted feature by curvelet transform are applied to the neural network for training and testing. The performance of proposed work show efficient results.

References

Lung Cancer Detection using Curvelet Transform and Neural Network

- Guesmi, H.; Trichili, H.; Alimi, A. M.; Solaiman, B., &quot;Curvelet transform-based features extraction for fingerprint identification&quot; in Biometrics Special Interest Group (BIOSIG), 2012 BIOSIG - Proceedings of the International Conference; ©IEEE
- Sumana, I. J.; Islam, M. M.; Dengsheng Zhang; Guojun Lu, &quot;Content based image retrieval using curvelet transform&quot; in Multimedia Signal Processing, 2008 IEEE 10th Workshop; ©IEEE, doi: 10.1109/MMSP.2008.4665041

**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Lung cancer  Curvelet transforms  Neural Network.