The paper proposes a method using Shuffled Frog Leaping Algorithm (SFLA) to identify the optimal frequencies (center frequency and bandwidth) of the bandpass filter. Addition, fast kurtogram is also used to find the optimal bandpass filter. Simulated results on the data sets of the CWRU Bearing Data Center verify the effectiveness of SFLA approach, and show that the proposed method outperforms fast kurtogram.

**References**

Online.


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13.

**Index Terms**

Computer Science       Signal Processing

**Keywords**

Envelope detection, Fast kurtogram, SFLA, Bearing diagnosis.