Abstract

Fetal ECG contains precise knowledge that may aid doctor in creating well-suited choices throughout pregnancy and labor. Authentic FECG signal is still extraordinarily complicated and very contaminated by outer disturbances. Hence extraction of clean fetal ECG is extraordinarily crucial for fetal surveillance. This is often accomplished by putting electrodes on mother’s abdomen. Anyway it is tainted with varied sources of noise. This paper compares LMS adaptive filter for FECG extraction with neural network based adaptive filter. Real fetal ECG database was used. Experimental results validated superiority of later scheme in terms of SNR and MSE.

References

2. M. Akay and E. Mulder, “Examining fetal heart-rate variability using matching pursuits"


Index Terms

Computer Science Image Processing

Keywords

Fetal ECG, abdominal ECG, adaptive filter, neural network