Student Project

Real time fetal ECG analysis

Supervisor
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Project description
This is a biomedical project for real time fetal ECG analysis. The process of fetal ECG recording is usually complicated since the maternal ECG is of higher amplitude compared to the fetal one. The fetal ECG is contaminated by many sources of noise such as fetal respiration and movement. The initial objective was to identify the fetal ECG in pregnant women and successfully separate it from the maternal signal. This was achieved in 2018 and this year we would like to successfully perform this task in real time and manage to attach the monitor we create to pregnant women and sample their baby's heart.

Required background
Signal and systems (essential), Matlab (essential), Random signals (desirable)

Environment
MATLAB

For further details, please contact harel: harelm@technion.ac.il