

1 Idea

Use the MSAX representation to represent different segments of an ischemia stress test. Find the MSAX_MINDIST between the same leads in different stress test segments. Based on the distance, we could attempt to classify normal and abnormal changes. Adjustments for the heart rate may need to be made for accurate results.

- use my thesis as one of the main sources
- because I showed that it is decently effective, use MSAX
- with MSAX, represent different sections of the stress test
- find the difference between the baseline recording and the different sections of the stress test on a lead-by-lead basis
- based on the distance to the baseline, try to determine if a condition is present
- to not have the naturally higher heart rate mess up the comparison, adjustments to normalize the heart rate may need to be performed
- an example of such normalization is performed in
Yang M, Liu B, Zhao M, Li F, Wang G, et al. (2013) Normalizing Electrocardiograms of Both Healthy Persons and Cardiovascular Disease Patients for Biometric Authentication. PLOS ONE 8(8): e71523. <https://doi.org/10.1371/journal.pone.0071523>