THESIS LITERATURE REVIEW

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Contents

1. Prasad & Parthasarathy, 2018

B. V. P Prasad & Velusamy Parthasarathy (2018) **Detection and classification of cardiovascular abnormalities using FFT based multi-objective genetic algorithm**, Biotechnology & Biotechnological Equipment, 32:1, 183-193; https://doi.org/10.1080/13102818.2017.1389303

Summary.

- signal processing and data analysis are widely used methods
- detecting cardiovascular abnormalities with an ECG is possible
- a fuzzy-based multi-objective algorithm using a fast fourier transform is used to extract rough features like PQRST amplitude
- then apply an algorithm to classify the abnormality
- ECG behavior depends on many different factors
- accuracy is achieved by taking into account these factors
- maintaining a database of previous results makes prediction better
- this provides 98.7% efficiency in abnormality detection

Date: September 24, 2020.