

WT, especially for processing time-varying biomedical signals. The power of WT lies in its multiscale information analysis which can characterize a signal very well. It is clear that the WT method will lead to a new way of biomedical signal processing. Table - 1 shows the detection results on the whole database. The information about the features is very useful for ECG Classification, Analysis, Diagnosis, Authentication and Identification.

TABLE - 1: TEST RESULTS SHOW THE DETECTION RESULTS

Record	Total beats	FP	FN	FP + FN	Detection Error Rate	Sensitivity
100	2272	2	0	2	0.09	99.96
105	2543	18	11	29	1.14	100.00
108	1775	27	35	62	3.49	99.83
115	1953	0	0	0	0.00	99.85
118	2278	10	3	13	0.57	99.88
124	1473	1	2	3	0.20	99.75
200	2601	0	1	1	0.04	99.96
202	2136	8	0	8	0.37	100.00
208	2956	0	5	5	0.17	99.83
210	2647	0	4	4	0.15	99.85
215	3256	0	4	4	0.12	99.88
Average	2354	6	6	12	0.58	99.89

Furthermore, ECG signal is a life indicator, and can also be used as a tool for liveness detection. People have similar but different ECG. The physiological and geometrical differences of the heart in different individuals display certain uniqueness in their ECG signals. Hence ECG will be used as a Biometric tool for Identification and Verification of Individuals.

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