Optimization of QT-Measurement Reliability in Automated ECG Annotation
(with Results from Phase-1 studies)
Sven Mensing

Semiautomated ECG analysis may be optimized by classification of T-Waves into evaluable and non-evaluable wavforms.

Three classification methods are compared: Linear Discrimination, Bayesian Neural Network and Support Vector Machines. Three data reduction techniques are evaluated. The results form the current study suggests that the combination of linear discrimination and spectral density data reduction are considered optimal. This combination is compared to a quality restriction technique already in use, based of nearly 8,000 Phase-I ECGs, based on a resampling approach.

This presentation represents some of the results of my masters thesis: „Optimization of QT Measurement Method Precision and Reliability in 12-Lead Electrocardiograms” (Sven Mensing, 2005, Greifswald University).