Author's response to reviews

Title: Prediction Models in the Design of Neural Network based ECG Classifiers: A Neural Network and Genetic Programming approach

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PDF covering letter

Response to referee's comments

The following include a point by point response to the reviewer’s comments. The format follows a summary of the reviewer's comment in bold text, followed by the author's response to each point in ordinary text.

Summary

The authors are once again grateful for the comments made by the reviewer and as such have modified the paper appropriately.

The abstract has been changed to accommodate the suggestions made in an effort to try and make the work more understandable for a reader, reading the abstract for the first time. The section on Genetic Programming has been re-written for the purposes of clarity and additional references have been included to support the work on Feature Selection.

All comments made by the reviewer have been addressed and the paper appropriately modified. Full details of all changes made follow in the responses to the reviewer’s comments.

Reviewer’s Report
Dr Peter Macfarlane

In the abstract there is no mention of the fact that the prediction models are trained with respect to results that have already been obtained from training a network to undertake bi-group classification between anterior myocardial infarction and normal patients.

The methods section of the abstract has been altered to include these details and additionally specifies that 44 different classifiers were used for training and testing.

When this fundamental point is understood, the paper then begins to make more sense.

The authors agree with the reviewer's comments. This had been an important aspect which the abstract lacked and has now been amended accordingly.
The description of genetic programming is still rather confusing.

This section has been re-written for clarification purposes.

No co-efficients are published.

The authors intend this work to be of use to others in terms of the ability to predict the point at which a network should be stopped during training to achieve maximum generalisation. It has been the intention of the paper to present the results of the approach/methods.

One of the variables input to the network is feature selection but again nowhere is this defined.

This section has been expanded and a reference to the author's earlier work included for further reference.

Specific Comments
Abstract 2 The results have been re-written to indicate the significance of the results in terms of p values.
4 2 Figure 1 caption corrected
4 11 Corrected
6 1 Description of Genetic Programming re-written.
7 1/2 Corrected
11 8 Corrected