**Reviewer A:**

**1/ The manuscript describes various machine learning and deep learning approaches for EEG data analysis, including HMMs using hand crafted features; combining feature extraction with deep learning, the end-to-end CNN+LSTM based solutions and GAN for EEG data augmentation etc. The title of the manuscript suggests an overall study on EEG signal analysis however the experiments are conducted on seizure detection only, which is a quite specific area in EEG signal analysis. The authors should mention some recent studies on other EEG applications, such as attention detection or motor imagery detection using deep learning.**

The title of the paper has been adjusted to make the focus of the paper clearer.

**2/ It would be nice to have more quantitative comparison on the computational complexity of the proposed approaches. For examples, the number of trainable parameters contained in different deep learning networks, and time used for model fitting etc.**

Some information about computational complexity was added to the Experimentation section. Since we are using standard packages such as Keras and TensorFlow, we don’t really think computational complexity should be a major focus of this paper. Readers can learn more about that by following the references for these packages.

**Reviewer B:**

**(1) The degree of similarity obtained by the Cross Check Software is too high (47%). Please reduce the degree of similarity of your paper below 30%**

As explained through a lengthy email exchange, if you run CrossCheck properly, you will find the similarity measure is 15%. CrossCheck uses TurnItIn, and we have run TurnItIn ourselves. We can provide a report if necessary.

**(2) Some grammar errors appearing in your paper. Please ask a professional to help you to correct the grammar errors appearing in your paper.**

The paper has been carefully proofread many times. We would like specific examples where the reviewer feels there are grammar problems.

**(3) Please clearly describe the contributions of your paper in the Introduction Section and the Conclusions Section.**

This was done. It is important to note this is a book chapter not an original research paper. The style of writing needs to reflect the tutorial nature of the material, not focus on original research contributions.

**Reviewer C:**

**“Additional comments: my competence in evaluating this paper is limited, because I’m a circuit/architecture guy.”**

This comment does not need to be addressed.