Review of: "Multi-Centroid Hyperdimensional Computing Approach for Epileptic Seizure Detection"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Authors have presented a novel approach of multi-centroid hyperdimensional (HD) computing for detection of epileptic seizures. The main key points to note in this apporach are:

1. This method takes into account the general problem of imbalanced datasets containing unequal number of samples belonging to different classes.

2. This approach shows a performance improvement of 14% for seizure detection as compared to traditional binary classification apporaches for imbalanced datasets.

3. This semi-supervised learning based approach makes use of several features belonging to different spectral sub-bands such as delta, theta, alpha, beta and gamma bands including entropy, power spectral density based spectral features and mean spectral amplitudes etc.

4. It handles the highly variant nature of EEG segments for different classes such as, interictal and ictal, in an impressive manner.

5. This method provides a real - time solution to seizure detection in an accurate and compuationally efficient manner.