EEG Event Detection Using Big Data

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Although signal processing has attempted for reading EEGs, these efforts have mostly yielded poor results. These algorithms, based largely on heuristic methods or trained on modest data sets, have lacked the statistical power to adequately generalize their performance over the great variability seen in the clinic. Here, we present our efforts to overcome these limitations by using machine learning algorithms that are trained on a Big Data corpus comprising over 22,000 clinical recordings made in the Neurology department at Temple University Hospital over a ten-year span.