Spatio-Temporal Analysis of EEG data using Wavelets and Geostatistical methods.

by

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DECLARATION

I certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree.

I certify that to the best of my knowledge, any help received in preparing this thesis, and all sources used, have been acknowledged in this thesis.

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ABSTRACT

My intention here is to provide an overview of the methodology used in applying wavelet analysis techniques to undertake signal analysis combined with the application of geostatistical methods. After defining the problem and provision of the application of Wavelets to mismatch negativity trials, I provide a succinct walk through wavelet analysis and some applications, also introduce the possibility of spatial correlation and develop models to allow for such. Finally we construct methods enabling us to detect the latency of onset of mismatch negativity responses.

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