EEG and MEG Inversion Using Convolutional and Recurrent Neural Networks

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***Abstract*—BCI, diagnostics - localize neural activity Measurement techniques dense sensors Average acros trials Typical inversion approach Our approach more simplified CNN/RNN/MLP Test data sets evaluate architectures for error and ability to generalize after training Key results**

***Index Terms*—EEG, MEG, Localization, Neural networks.**

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I. Introduction

THERE is a great need for interpretation of brain signals for both use in control of devices, for prosthetics, for example, or for disease diagnostics []. Sensor measurements include ... Problem of neuron localization or distribution of currents typical approaches our approach: max dipole [1]

II. Methods

1) Datasets: Subsubsection text here. Audio Faces

A. Preprocessing

B. Description of Neural Networks

Subsection text here.

C. Hyperparameters

D. Training and testing

III. Results

IV. Conclusion

The conclusion goes here.

Acknowledgment

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References

[1] A. Gramfort, M. Luessi, E. Larson, D. A. Engemann, D. Strohmeier, C. Brodbeck, R. Goj, M. Jas, T. Brooks, L. Parkkonen *et al.*, "Meg and eeg data analysis with mne-python," *Frontiers in neuroscience*, vol. 7, p. 267, 2013.

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Manuscript received

Jane Doe Biography text here.

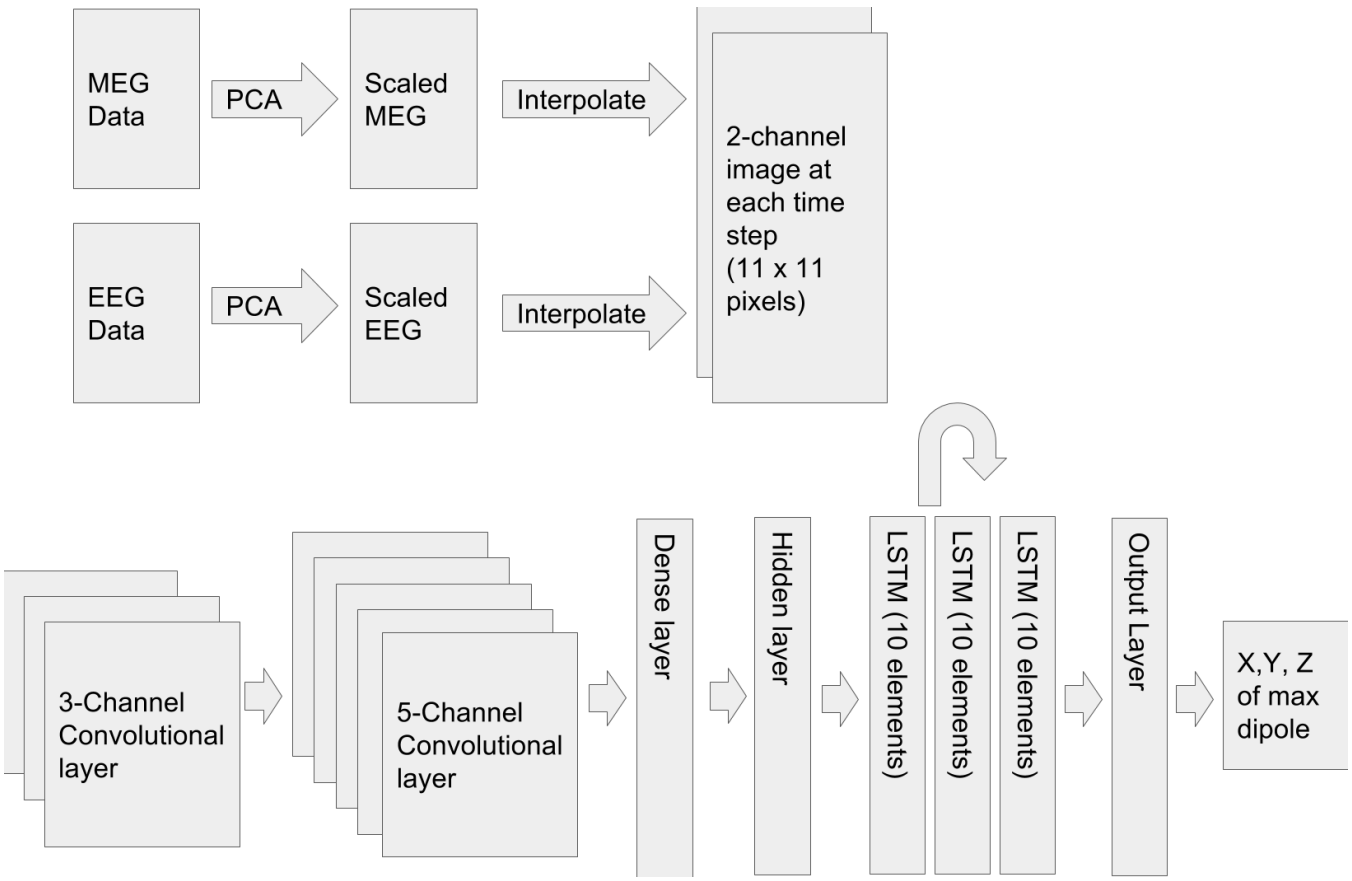

Fig. 1. Block diagram of CNN+RNN neural network.