A Pipeline for Developmental EEG Data: An Introduction

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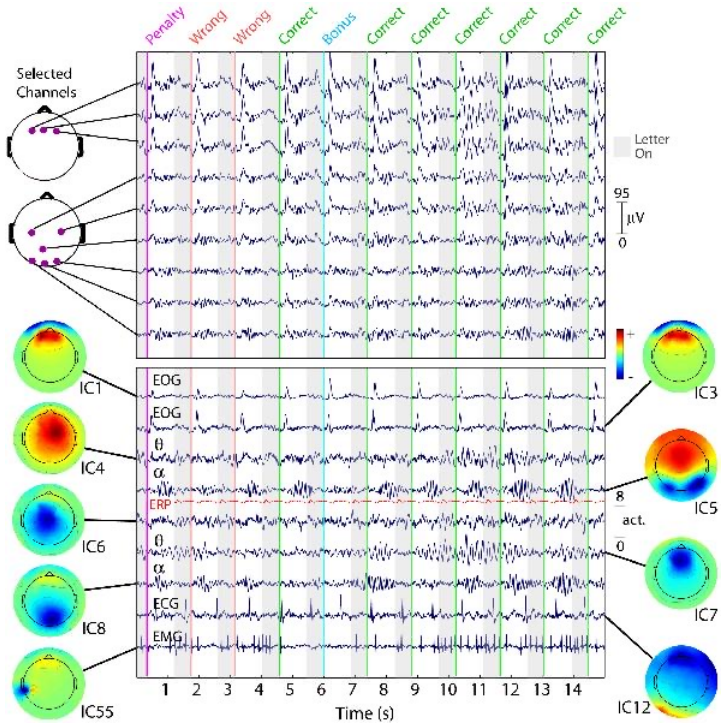
Developmental EEG Data

- Historically noisy
- Data is likely to suffer from greater artifacts

Preprocessing

- Standard analytical techniques that make up EEG data processing to extract the brain signal and remove unwanted noise.
- Examples: filtering, referencing, ICA, artifact removal



EEG Pipelines and Toolboxes

- Currently, many tools exist to analyze EEG data.
- Examples: EEGLAB, MNE, FieldTrip
- Offer many options for preprocessing EEG data

Catch 22

- There is no standardization of EEG analysis pipeline for developmental EEG data.
- There is no metric to extrapolating meaning behind preprocessing choices made by the researcher.
- Researchers overanalyze data inadvertently removing brain data along with noise.

Best preprocessing practices?

- Delorme (2023) proposes the optimal analytical tools to employ when analyzing adult EEG data.

Current Study

- We aim to further scrutinize Delorme (2023) and provide a robust pipeline for analyzing developmental EEG data.

Thanks for listening!

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