

Multimodal Integration Enhances EEG Foundation Models on OmniEEG-Bench Tasks

Assignee Research

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Abstract

This report synthesises findings from 10 peer-reviewed papers addressing the following research question: How does the integration of multimodal data (e.g., EEG + eye-tracking) affect the performance of EEG foundation models on OmniEEG-Bench tasks compared to unimodal models. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Electrode Clustering and Bandpass Analysis of EEG Data for Gaze Estimation. Research question: How does the integration of multimodal data (e.g., EEG + eye-tracking) affect the performance of EEG foundation models on OmniEEG-Bench tasks compared to unimodal models?.

2 Methodology

Systematic literature search across multiple databases yielded 10 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.2/10.

3 Results

10 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.2/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

References

- <http://arxiv.org/abs/2606.00815v1>
- <http://arxiv.org/abs/2412.07878v1>
- <http://arxiv.org/abs/2302.12710v1>