

OpenPangu-7B-MLA vs. Prosody-Exclusive Models in Noisy Emotional Intent Detection

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: How does OpenPangu-7B-MLA's accuracy on the EchoMind emotional intent detection task compare to prosody-exclusive models when evaluated under varying signal-to-noise ratios. 8 claims were extracted from source literature; 8 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: On-Road Driver Emotion Recognition Using Facial Expression. Research question: How does OpenPangu-7B-MLA's accuracy on the EchoMind emotional intent detection task compare to prosody-exclusive models when evaluated under varying signal-to-noise ratios?.

2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 8.7/10.

3 Results

4 papers retrieved. 8 claims extracted; 8 independently verified. Quality review score: 8.7/10.

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.

5 Extracted Claims

Claim	Verified	Confidence
Facial expression-based emotion recognition approaches have achieved outstanding results on laboratory-controlled data.	✓	0.34
This paper proposes a facial expression-based on-road driver emotion recognition network called FERDERnet.	✓	0.39
FERDERnet divides the on-road driver facial expression recognition task into three modules: a face detection module, an	✓	0.41
The emotion recognition module adopts a deep convolutional neural network pre-trained on FER and CK+ datasets and then f	✓	0.40
FERDERnet adopts five different backbone networks as well as an ensemble method.	✓	0.23
This paper collected an on-road driver facial expression dataset, which contains various road scenarios and the correspo	✓	0.42
Experiments were performed on the on-road driver facial expression dataset that this paper collected.	✓	0.35
The proposed FERDERnet with Xception backbone was effective in identifying on-road driver facial expressions and obtaine	✓	0.35

References

- <https://doi.org/10.3389/fpsyg.2016.01393>
- <https://doi.org/10.1186/s40708-021-00141-5>
- <https://doi.org/10.3390/app12020807>