Fine-Tuning Stable Diffusion with Fine-T2I Resolution Diversity and FID Score Impact

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: What is the effect of Fine-T2I's resolution diversity on the Frchet Inception Distance (FID) scores of Stable Diffusion fine-tuning versus lower-resolution datasets. 10 claims were extracted from source literature; 10 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: Machine learning for human emotion recognition: a comprehensive review. Research question: What is the effect of Fine-T2I's resolution diversity on the Frchet Inception Distance (FID) scores of Stable Diffusion fine-tuning versus lower-resolution datasets?.

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. 10 claims extracted; 10 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
Emotion is an interdisciplinary research field investigated by many research areas such as psychology, philosophy, compu	✓	0.29
Emotions influence how we make decisions, plan, reason, and deal with various aspects.	✓	0.28
Automated human emotion recognition (AHER) is a critical research topic in Computer Science.	✓	0.38
AHER can be applied in many applications such as marketing, human–robot interaction, electronic games, E-learning, and m	✓	0.28
It is essential for any application requiring to know the emotional state of the person and act accordingly.	✓	0.27
The automated methods for recognizing emotions use many modalities such as facial expressions, written text, speech, and	✓	0.42
The signals can be used individually (uni-modal) or as a combination of more than one modality (multi-modal).	✓	0.27
Most of the work presented is in laboratory experiments and personalized models.	✓	0.23
Recent research is concerned about in the wild experiments and creating generic models.	✓	0.27
This study presents a comprehensive review and an evaluation of the state-of-the-art methods for AHER employing machine	✓	0.45

References

- https://doi.org/10.1051/itmconf/20268403027
- https://doi.org/10.3390/electronics15061293

- https://doi.org/10.1007/s00521-024-09426-2