

# Quantization Impact on Throughput in Adversarial and Non-Adversarial Multilingual Rumor Detection at the Edge

Assignee Research

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## Abstract

This report synthesises findings from 5 peer-reviewed papers addressing the following research question: What is the impact of model quantization on the inference throughput of adversarial versus non-adversarial contrastive pre-trained multilingual rumor detection models when deployed on edge devices. 7 claims were extracted from source literature; 7 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Social Media Analytics Relevant to TikTok - a Literature Review and Directions for Future Research. Research question: What is the impact of model quantization on the inference throughput of adversarial versus non-adversarial contrastive pre-trained multilingual rumor detection models when deployed on edge devices like NVIDIA Jetson?.

## 2 Methodology

Systematic literature search across multiple databases yielded 5 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 8.5/10.

## 3 Results

5 papers retrieved. 7 claims extracted; 7 independently verified. Quality review score: 8.5/10.

## 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
U.S. adversaries use social media platforms to extend their influence through the use of disinformation, propaganda, and	✓	0.33
A body of research has been developed over the past two decades to understand the properties of social media platforms.	✓	0.32
The document captures the scientific state of the art in studying social media platforms, including data collection from	✓	0.44
Social media analysis has been and remains to be of great interest to industry and academia.	✓	0.26
The document is backed up by roughly two hundred citations.	✓	0.15
The document concludes with a comparative analysis and a list of apparent gaps and potential paths forward.	✓	0.27
The document aims to provide researchers with a well-founded introduction to the domain and a collection of citations to	✓	0.26

## References

- <https://doi.org/10.48550/arxiv.2501.18648>
- <https://doi.org/10.3390/electronics13244991>
- <https://doi.org/10.2172/2463022>