

# Graph Neural Networks in Multimodal Fusion for Zero-Shot Long-Horizon Navigation

Assignee Research

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## Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: How does the integration of graph neural networks in multimodal fusion architectures impact zero-shot reasoning accuracy on long-horizon navigation benchmarks compared to attention-based models. Multimodal information extraction on social media is a series of fundamental tasks to construct the multimodal knowledge graph. The tasks aim to extract the structural information in free texts with the incorporate images, including: multimodal named entity typing and multimodal. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Multimodal Graph-Based Variational Mixture of Experts Network for Zero-Shot Multimodal Information Extraction. Research question: How does the integration of graph neural networks in multimodal fusion architectures impact zero-shot reasoning accuracy on long-horizon navigation benchmarks compared to attention-based models?.

## 2 Methodology

Systematic literature search across multiple databases yielded 15 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.5/10.

### **3 Results**

15 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.5/10.

### **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.

### **References**

- <http://arxiv.org/abs/1906.04972v1>
- <http://arxiv.org/abs/2404.14700v4>
- <http://arxiv.org/abs/2502.15290v1>