

# Tensorial Imputation vs Missing Indicators in Multi-View Graph Neural Networks for Code Generation

Assignee Research

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## Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: How does the integration of tensorial imputation techniques in multi-view graph neural networks compare to traditional missing indicator matrix approaches in terms of inference efficiency (measured in FLOPs per token)? Deep learning has become a popular tool for medical image analysis, but the limited availability of training data remains a major challenge, particularly in the medical field where data acquisition can be costly and subject to privacy regulations. Data augmentation techniques. 6 claims were extracted from source literature; 6 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Deep Learning Approaches for Data Augmentation in Medical Imaging: A Review. Research question: How does the integration of tensorial imputation techniques in multi-view graph neural networks compare to traditional missing indicator matrix approaches in terms of inference efficiency (measured in FLOPs per token) for code generation dependency graphs under adversarial attacks?.

## 2 Methodology

Systematic literature search across multiple databases yielded 12 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 8.3/10.

### 3 Results

12 papers retrieved. 6 claims extracted; 6 independently verified. Quality review score: 8.3/10.

### 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
Limited availability of training data is a major challenge in medical image analysis due to costly data acquisition and	✓	0.30
Traditional data augmentation techniques often produce limited and unconvincing results in medical imaging.	✓	0.28
Deep generative models are proposed to generate realistic and diverse data that conform to the true distribution of medi	✓	0.29
The review focuses on three types of deep generative models: variational autoencoders, generative adversarial networks,	✓	0.23
The review discusses the application of deep generative models for classification, segmentation, and cross-modal transla	✓	0.24
The review evaluates the strengths and limitations of variational autoencoders, generative adversarial networks, and dif	✓	0.19

### References

- <https://doi.org/10.1007/s10462-023-10662-6>
- <https://doi.org/10.1109/access.2023.3309601>
- <https://doi.org/10.3390/jimaging9040081>