

Zero-Shot Anomaly Detection Robustness Across Industrial Domains and Conditions

Assignee Research

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: How does the robustness of zero-shot anomaly detection pipelines vary when evaluated on cross-domain industrial datasets with varying lighting conditions and background textures. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: AnomalyPainter: Vision-Language-Diffusion Synergy for Zero-Shot Realistic and Diverse Industrial Anomaly Synthesis. Research question: How does the robustness of zero-shot anomaly detection pipelines vary when evaluated on cross-domain industrial datasets with varying lighting conditions and background textures?.

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 3.8/10.

3 Results

15 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.8/10.

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/2510.18998v1>
- <http://arxiv.org/abs/2510.15602v1>
- <http://arxiv.org/abs/2503.07253v2>