

Edge Detection

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Abstract

Gradient-based edge detection methods.

1 Introduction

This report presents computational analysis of edge detection.

2 Mathematical Framework



edge_detection_plot1.pdf

Figure 1: Primary analysis results.

3 Secondary Analysis



edge_detection_plot2.pdf

Figure 2: Secondary analysis comparison.

4 Parameter Study



Figure 3: Parameter sensitivity analysis.

5 2D Visualization



edge_detection_plot4.pdf

Figure 4: Two-dimensional field visualization.

6 Distribution Analysis



Figure 5: Statistical distribution analysis.

7 Time Series



edge_detection_plot6.pdf

Figure 6: Time series visualization.

8 Results Summary

9 Conclusions

This analysis demonstrates the computational approach to edge detection.