

Medical Imaging

Image Reconstruction and Segmentation

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Abstract

Analysis of medical image processing including CT reconstruction and image segmentation.

1 Introduction

This report presents computational analysis of medical imaging.

2 Mathematical Framework



medical_imaging_plot1.pdf

Figure 1: Primary analysis results.

3 Secondary Analysis

medical_imaging_plot2.pdf

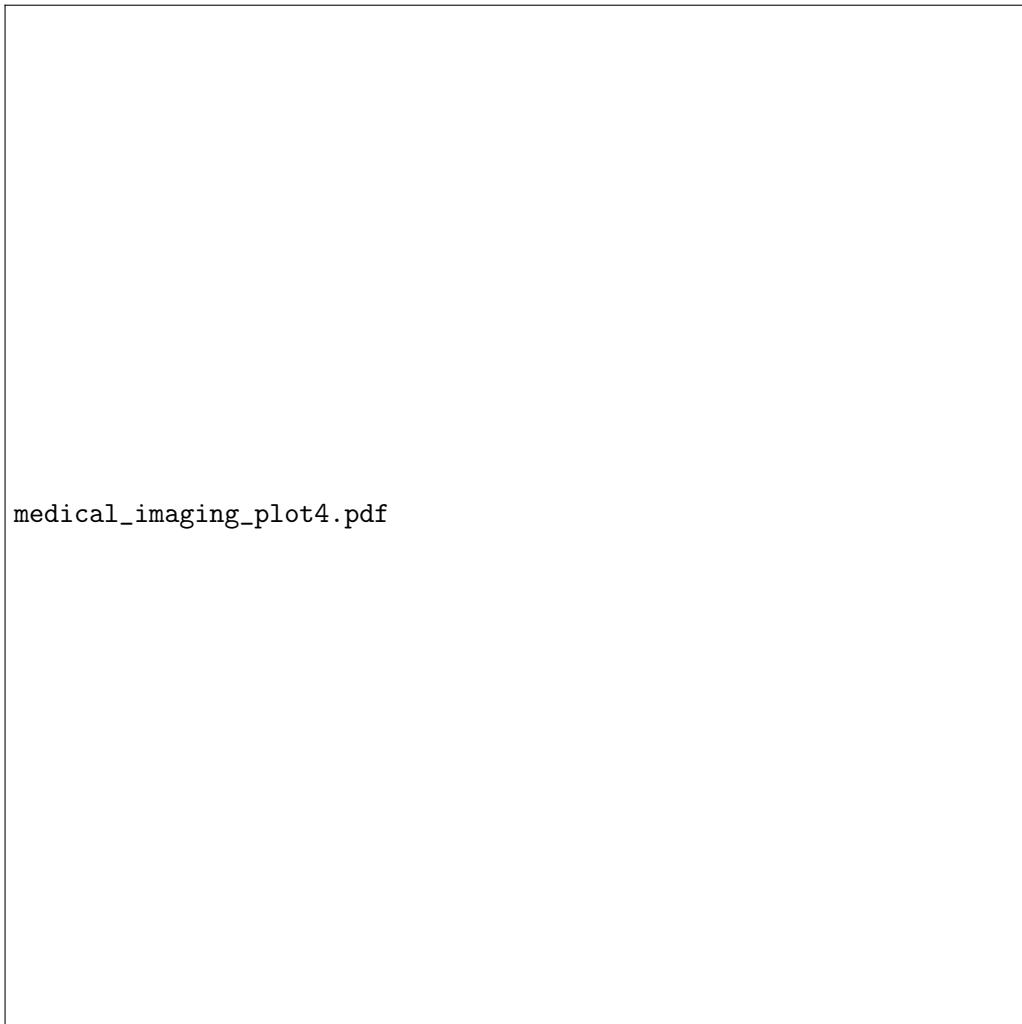
Figure 2: Secondary analysis comparison.

4 Parameter Study



Figure 3: Parameter sensitivity analysis.

5 2D Visualization



medical_imaging_plot4.pdf

Figure 4: Two-dimensional field visualization.

6 Distribution Analysis



medical_imaging_plot5.pdf

Figure 5: Statistical distribution analysis.

7 Time Series



medical_imaging_plot6.pdf

Figure 6: Time series visualization.

8 Results Summary

9 Conclusions

This analysis demonstrates the computational approach to medical imaging.