Queueing Theory
M/M/1 Systems

Operations Research Research Group

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Abstract

Stochastic service system analysis.

1 Introduction

This report presents computational analysis of queueing theory.

2 Mathematical Framework

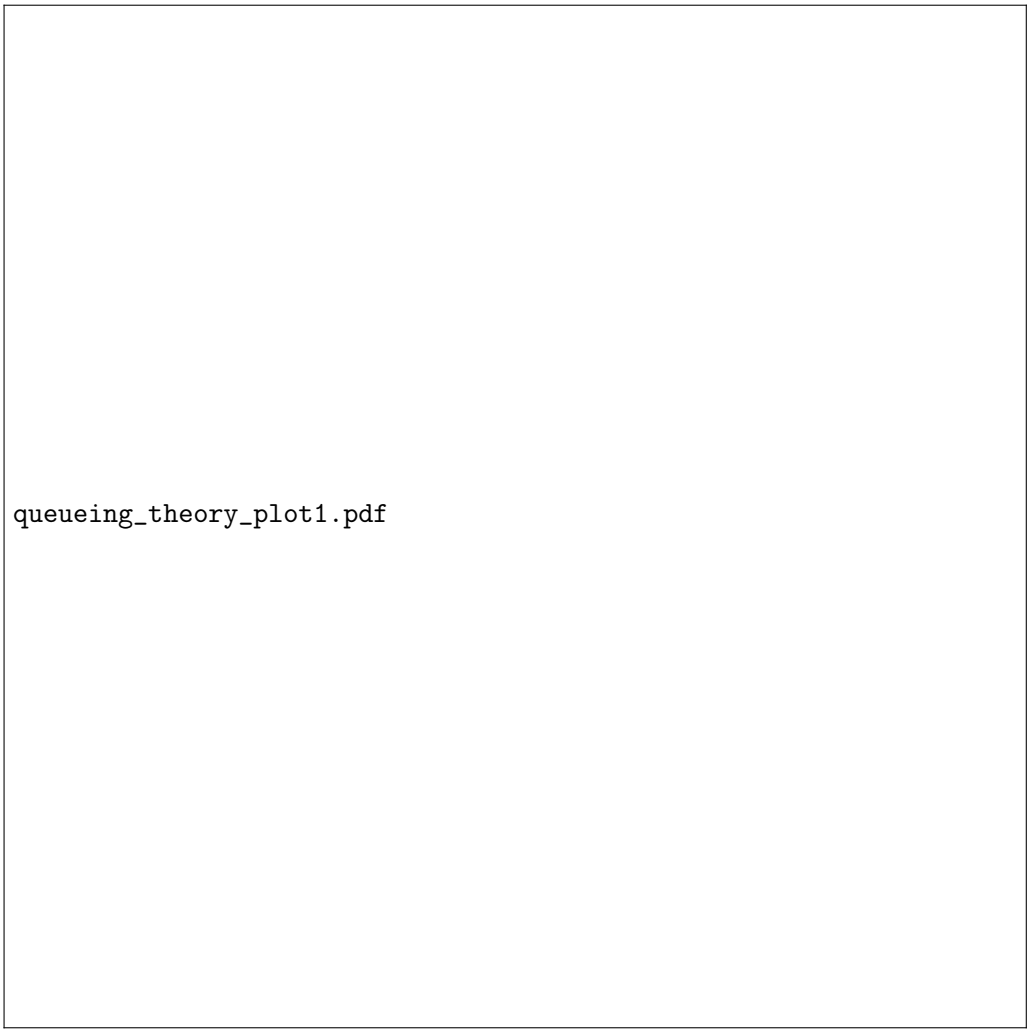

Figure 1: Primary analysis results.

3 Secondary Analysis

Figure 2: Secondary analysis comparison.

4 Parameter Study

Figure 3: Parameter sensitivity analysis.

5 2D Visualization

Figure 4: Two-dimensional field visualization.

6 Distribution Analysis

Figure 5: Statistical distribution analysis.

7 Time Series

Figure 6: Time series visualization.

8 Results Summary

9 Conclusions

This analysis demonstrates the computational approach to queueing theory.