Mathematical Theory of Infectious Disease Epidemics
Final Project in Numerical Methods
American University of Armenia

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Contents

Abstract

This is a paper that aims to explain the SIR model and it's world applications.

1 Introduction

Intro to SIR models.

1.1 This is a subsection

2 Mathematical Formulation

2.1 This is a subsection

This is a subsection. But you can go even deeper.

3 Analytical Solutions

3.1 Another subsection

4 Numerical Methods for Solving the SIR Model

4.1 Yet another subsection

5 Implementation in Python

6 Simulation Results

7 Real-world Applications

8 Conclusion