

1D Heat Equation


Vishal Indivar Kandala

Applied Intelligent Systems Lab, Texas A&M University, College Station, TX



October 31, 2020

Overview

- 
- 1 Introduction
 - 2 Assumptions
 - 3 Process
 - 4 Numerical Scheme
 - 5 Results

Section 1

1 Introduction

2 Assumptions

3 Process

4 Numerical Scheme

5 Results



1D Heat Equation



Diffusivity



Section 2

1 Introduction

2 Assumptions

3 Process

4 Numerical Scheme

5 Results



Material



Model



Section 3

1 Introduction

2 Assumptions

3 **Process**

4 Numerical Scheme

5 Results





Section 4

1 Introduction

2 Assumptions

3 Process

4 Numerical Scheme

5 Results

Crank Nicholson Scheme



Strengths



Weaknesses



Fix



Section 5

1 Introduction

2 Assumptions

3 Process

4 Numerical Scheme

5 Results



Plots



Plots



video



video





Thank You!