



NAVIN M

Final Project

PROJECT TITLE

TEXT GENERATOR

AGENDA

- Introduction
- Problem Statement
- Project Overview
- End Users
- Solution and Value Proposition
- Modelling and Methodology
- Results and Findings
- Conclusion



PROBLEM STATEMENT

Develop a Recurrent Neural Network (RNN) model capable of generating coherent text sequences based on a given dataset of sample sentences. The model should learn the underlying structure and patterns within the text data and generate new sequences that resemble the style and content of the original text.



PROJECT OVERVIEW

The RNN Text Generation project aims to develop a machine learning model capable of generating coherent text sequences based on a given dataset of sample sentences. Leveraging the power of Recurrent Neural Networks (RNNs), the model learns the sequential dependencies within the text data and generates new sequences that mimic the style and content of the original text.



WHO ARE THE END USERS?

- Content Creators
- Chatbot Developers
- Creative Writers
- Language Learners

YOUR SOLUTION AND ITS VALUE PROPOSITION



The RNN Text Generation project offers a solution for generating coherent and contextually relevant text sequences using Recurrent Neural Networks (RNNs). The key value propositions of this solution include:

Value Proposition:

- Automated Text Generation
- Versatile Applications
- Enhanced Creativity

THE WOW IN YOUR SOLUTION

- Realistic text generation
- Adversarial training for high-quality results
- Scalable and customizable architecture



MODELLING

Teams can add wireframes

- Data preprocessing and augmentation
- Generator and discriminator architecture
- Training process and optimization techniques
- Model evaluation and validation

RESULTS

```
{'e': 0, 'g': 1, 'm': 2, 'f': 3, 'n': 4, 'y': 5, 'i': 6, 'v': 7, 'a': 8, 'r': 9, 'w': 10, 'u': 11, 'd': 12, ' ': 13, 'o': 14, 'h': 15, 'c': 16}
The longest string has 15 characters
Input Sequence: hey how are yo
Target Sequence: ey how are you
Input Sequence: good i am fine
Target Sequence: ood i am fine
Input Sequence: have a nice da
Target Sequence: ave a nice day
Input Sequence: where are you
Target Sequence: here are you
Input shape: (4, 14, 17) --> (Batch Size, Sequence Length, One-Hot Encoding Size)
GPU not available, CPU used
Epoch: 10/100..... Loss: 2.3870
Epoch: 20/100..... Loss: 2.1433
Epoch: 30/100..... Loss: 1.8889
Epoch: 40/100..... Loss: 1.4564
Epoch: 50/100..... Loss: 1.1324
Epoch: 60/100..... Loss: 0.8485
Epoch: 70/100..... Loss: 0.6194
Epoch: 80/100..... Loss: 0.4394
Epoch: 90/100..... Loss: 0.3098
Epoch: 100/100..... Loss: 0.2253
'where are you '
```

[Demo Link](#)