**PRE Request**

**Python**

**Numpy, pandas, Matplotlib**

 Introduction to NLP (Pre-Requisite)

Section 10: Word Embeddings (Pre-Requisite)

41. Word2Vec Intro

42. Word2Vec Part 2

43. Pretrained Word2Vec

44. Word2Vec INTUITION

45. Word2Vec 50Features

46. Word2Vec CBOW

47. Word2Vec SkipGrams

48. GloVe

49. fastText

50. Cosine Similarity

Section 11: NLP Neural Networks (Pre-Requisites)

**RNN , LSTM , GRU, BI-DIRECTIONAL**

**DEEP LEARNING PRE-REQUEST**

* **NN, ACTIVATION FUNCTION,**77. Backpropagation vs Forward Pass, 78. Gradient Descent, CNN ,RNN ,LSTM, PRE TRAIN MODEL, VGG16, RESNET, ALEXNET, MOBLIENET, TRANSFER LEARNING

**TRANSFORMERS**

**TYPES**

103. What are Transformers

104. Self Attention is all you need!!

105. Encoder Architecture

106. Contextual Embeddings

1. Decoder Architecture

Section 14: Encoder Only Architecture (Pre-Requisite)

108. Introduction to BERT

109. BERT Configurations

110. BERT Fine Tuning

111. BERT Pre Training (Masked LM)

112. Input Embeddings BERT

113. ARLM vs AELM

114. RoBERTa

115. DistilBERT

116. AlBERT

**DECODER ONLY ARCHITECTURE**

118. GPT Architecture

119. GPT (Masked Multi Head Attention)

120. GPT Blocks

1. GPT Training

Section 16: LLM Basics - Tokens, Context Window, Prompt, Prompt Tuning etc.

122. What are Tokens

123. Context Window

124. What is a Prompt?

125. Prompt Engineering

126. Prompt Tuning

127. Prompt Structures

Section 17: RAGs (Retrieval Augmented Generation)

LANGCHAIN

PROMPT ENGINEERING

VECTOR DATABASE VECTOR INDEX

MODEL : OLLAMA , OPEN AI, XAI

FINE TUNE

RAG AND EVALUATION MATRICS

DEPLOY GEN AI PROJECT

GEN AI PROJECT

INTERVIEW PREPARATIONS

**course Resources**

Congrats on enrolling in the **Mastering Generative AI: LLMs, Prompt Engineering & More!**Course

**Download the resources:**

Python: [https://github.com/pik1989/PythonforDS](https://github.com/pik1989/PythonforDS" \t "https://www.udemy.com/course/mastering-generative-ai/learn/lecture/_blank)

NLP: [https://drive.google.com/drive/folders/1u7MYQMiVh-2Eus0f2d3KLbi0FCxg6kci?usp=sharing](https://drive.google.com/drive/folders/1u7MYQMiVh-2Eus0f2d3KLbi0FCxg6kci?usp=sharing" \t "https://www.udemy.com/course/mastering-generative-ai/learn/lecture/_blank)

Deep Learning: [https://drive.google.com/drive/folders/1vA-jClnGCd1GeqvEin9SP-d3hr2puHRA](https://drive.google.com/drive/folders/1vA-jClnGCd1GeqvEin9SP-d3hr2puHRA" \t "https://www.udemy.com/course/mastering-generative-ai/learn/lecture/_blank)

Deployment: [https://drive.google.com/drive/folders/1laq9u4sNkkNYv\_L\_q99NQnYEU01icC9w?usp=sharing](https://drive.google.com/drive/folders/1laq9u4sNkkNYv_L_q99NQnYEU01icC9w?usp=sharing" \t "https://www.udemy.com/course/mastering-generative-ai/learn/lecture/_blank)

Projects: Individual project codes are shared in the Projects section

Click here to download the presentation used: [https://drive.google.com/drive/folders/1rejrw6o6Naz8oX8D9tHSMC5P2efibfwF?usp=sharing](https://drive.google.com/drive/folders/1rejrw6o6Naz8oX8D9tHSMC5P2efibfwF?usp=sharing" \t "https://www.udemy.com/course/mastering-generative-ai/learn/lecture/_blank)