

Introduction to LLMs Bootcamp - AI Planet

Curriculum Overview

Note: The contents of this Curriculum is subject to change, we have given a rough content to be covered in the Bootcamp. If you think it needs to be updated, please reach out to: tarun@aipplanet.com

Red: Speaker Required

Green: Speaker Found

Day 1: Introductory Video

- How do language models work?
- Autoregressive and AutoEncoder language models
- Information theory, entropy of English, n-gram models

Day 2: Recurrent Neural network

- Simple RNN
- LSTM
- GRU

Day 3: Attention Model Mechanism

- Encoder and Decoder Understanding
- Attention model intuition
- Attention model implementation. [Language Translation]

Day 4: Transformers Implementation

- Transformers network intuition
- Self head attention and Multi head attention
- TensorFlow architecture from scratch using TensorFlow- Hands-on

Day 5: Pre-trained Models

- BERT
- RoBERTa

Day 6: Continuation with Pre-trained models

- T5
- GPT3

Day 7: Generating Text with LLMs

- Autoregressive Text Generation
- Controlling Text Generation
- Open Source LLMs model overview

Day 8: Fin-tuning LLMs for Specific Tasks

- Adapting LLMs for different tasks
- Fine-tuning strategies and best practices
- Case studies of successful fine-tuning applications

Day 9: Transfer Learning and Multimodal Models

- Transfer learning in language models
- LLMs in computer vision tasks
- Cross-modal applications of LLMs

Day 10: LangChain

Day 11: Building ChatBots

- **Content**: Project based Hands-on session to build a Q&A ChatBot over the PDF documentation or any other.

Day 12: LLamaIndex and LLamaHub

Day 13: LLamaIndex and Langchain Integration

- **Content**: Project based Hands-on session to integrate LLamaIndex with Langchain (HuggingFace + OpenAI both implementation).

Day 14: Prompt Engineering

FAQs

1. What is the timeline for the LLM Bootcamp?

The LLM Bootcamp will kickstart from August 12, 2023 to September 24, 2023

2. How many sessions per week?

We are planning for 2 sessions per week i.e., one session on Saturday and the other one on Sunday.

3. What is the duration of each session?

We expect each session to be at least 75-90 minutes.

4. Who are the targeted audience?

The target audience are the Data Scientists, Machine Learning Engineers, Students with Machine Learning or Data Science knowledge.

5. Is the Bootcamp Online or Offline?

All the Bootcamp will be done in an Online mood via Zoom or Streamyard.

6. What is the price for the LLM Bootcamp?

The Bootcamp is free of cost. It's for the community to learn and grow.

Below is the bootcamp structure that will be taken care by AI Planet Team:

- LLM Bootcamp Content
- Assessments and Quiz
- Peer Review