



Lecture 15: Course Wrap Up; Next Steps; Generative AI

🕒 Created @August 14, 2024 12:40 AM

What is the learning problem?

What model?

With what optimization algorithm?

How will you evaluate the model?

From what experience?

What loss function are you optimizing?

Are there any guarantees?

Who will it impact and how?

Types of ML:

- generative: tries to learn the structure of the data
- discriminative: only cares about segregating the data

Encoder/Decoder:

- An encoder encodes the input into the context
- The decoder decodes the context into output
- used in RNNs
- used in Long Short-Term Memory models

- more context, but still not enough for more complex tasks

Transformers:

- position encodings: each word has an index
 - allows you to look at the entire document instead of just one word at a time which improves training time
- self-attention: allows you to identify relevant words
 - attention heads select important parts of the input
 - more = capture more complex relationships