deeplearning.ai

Overview

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Course Info

Week 2

Natural Language Processing with Attention Models

Week 2

Discuss the topic here.

11 threads · Last post 8 hours ago

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Text Summarization

Compare RNNs and other sequential models to the more modern Transformer architecture, then create a tool that generates text summaries.

Key Concepts

- Describe the three basic types of attention
- Name the two types of layers in a Transformer
- Define three main matrices in attention
- Interpret the math behind scaled dot product attention, causal attention, and multi-head attention
- Use articles and their summaries to create input features for training a text summarizer
- Build a Transformer decoder model (GPT-2)

⌃ **Less**

Text Summarization

▶ **Video: Transformers vs RNNs** 6 min   [Resume]

▶ **Video: Transformer Applications** 8 min

▶ **Video: Dot-Product Attention** 7 min

▶ **Video: Causal Attention** 4 min

▶ **Video: Multi-head Attention** 6 min

▦ **Lab: Attention** 1h

▶ **Video: Transformer Decoder** 5 min

▶ **Video: Transformer Summarizer** 4 min

▦ **Lab: The Transformer Decoder** 1h

▭ **Reading: Content Resource** 10 min

Assignment

</> **Programming Assignment: Transformer Summarizer** 3h   Due Oct 19, 1:59 AM CDT