

summary

December 10, 2023

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[1]: print("""
Riker Wachtler
11 December 2023
DL Final Project
https://github.com/RikerW/final-dl
""")
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[2]: print("""
This is the completed version of my final project. I left short comments for
    ↳each thing I'm doing - but in short,
it's doing some pre-processing stuff as EDA and then getting into it.

This implements a mediocre language translation model (english to spanish)
    ↳using LSTMs, plus an encoder and decoder.

I'll be honest - I wrote most of this, then looked back and said oh whoops, I
    ↳need an AUTO-encoder for criteria 1, not just an encoder.
However, I think should more than count for "Deep Learning Models" - the
    ↳encoders are definitely a form of ANN?
They're just feed forward networks, unless I'm mistaken.

The callbacks I added are just logs, but hopefully that suffices. Anyway,
    ↳that's about it. This is a deceptively short project.
I reverse engineered a substantial portion from an example from Keras for
    ↳english->french, which is where I got the data from,
but I wrote all of this code myself.
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Overall takeaways - it's actually remarkably involved to do what I thought
↳ wouldn't take very long at first.
Not super hard, but certainly complex. We worked with similar LSTM stuff - but
↳ pre-loaded models. Combining them with writing my own encoders and decoders
↳ is VERY finicky as well.
I'm pretty sure despite re-running this repeatedly there's at least one odd
↳ variable name that breaks things because of how many times I rewrote this.

I definitely have more of an appreciation for machine translation. Also, mine
↳ sucked a little - I re-ran it a couple times and this is more or less what
↳ it outputs 70% of the time, I think i'm off by one for my OHE unfortunately.
Nonetheless, definitely an interesting project.

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