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Thread: [Python AI for understanding speech patterns](#)

Hello Buddy - December 7, 2017, 7:46 pm

Hi guys,

I was wondering if anyone here has had experience working with AI in python to try and understand speech patterns? As part of a school project I was thinking of incorporating this sort of thing but am not really sure where to begin. If you have any resources on This sort of thing or could point me to another part of the forum to ask this question it would be much appreciated. If you want anymore information on the sort of thing I am looking for please ask or feel free to pm me

Thank you in advance.

cattleofra - December 7, 2017, 8:14 pm

Hello,

Artificial Intelligence is a very broad term. You may be referring to something a lot more specific such as NN/DL/CNN. Firstly, you will need to explain exactly what is it that you are trying to accomplish (your idea?), which types of speech patterns? in which language? Then, you will need to evaluate how much data you actually have to train your network. Any sort of AI system you hear about nowadays, include 3 main things: algorithms, data and processing power.

Once you know what you want to do. You will have to research and study on the algorithms that could be suitable for your project. You will have to gather data, and a lot of it. But data by itself is not good enough. You will need to become a data scientist and begin filtering all the data to ensure that your model is not going to be learning something unwanted, for example, if your data contain sounds of dogs barking, your network may understand it as actual speech and this factor could ruin the whole network. So, if you are training a speech recognition system, even a simple one, you need to ensure that your data only contains sound of speech. You may also consider about background noise, sounds and etc, and to remove them if possible.

Then, after all this, comes your biggest problem. To actually train the network you are going to need computer power. And this could be expensive. This is not something I can help you with at this time. You might still be able to use your own computer, to train the network for a small number of epochs, such as 10-20 ephocs. But this will not generate an extremely accurate AI, so in your case I would focus more on the algorithms (tools) you want to be using and also the data and ensuring the data you have is clean.

I have not covered a lot here. If there is something which is unclear please let me know and I will try to help. Anyway the language of choice seems reasonable. You might want to use tools such as tensorflow/numpy/scikit-learn/caffe2.

Thanks,

cattleofra

klorox - December 11, 2017, 10:36 pm

Here's a bunch of API's that do exactly what you're looking for: [www w.programmableweb.c](http://www.programmableweb.com)

