
Subject: Aliza

Posted by [Wayne Parham](#) on Mon, 13 Nov 2023 15:34:34 GMT

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I've just released a fun little chatbot. As a nod to Weizenbaum's Eliza program, I've called it "Aliza."

If you don't know "Eliza" or who Joseph Weizenbaum was, ask Aliza.

You can reach it at any of these locations:

ParhamData.com:4222

PiSpeakers.com:4222

AudioRoundTable.com:4222

Right now, it has just the "standard" training included in gpt-3.5, which includes a bunch of data gathered up until around June 2021. So it can answer a lot of questions and be somewhat accurate on several topics. But then again, it lacks information on some things and where it lacks information, it will literally make stuff up. So keep that in mind when you interact with it.

I've done this largely as an experiment in large language model transformer-based AI. Specifically what I want to know is how much better I can train it in acoustics, and specifically on the details of Pi Speakers and recommended setups.

It already "knows" a lot about Pi Speakers, things like the fact that most models use waveguides, that I am the one that designed them, that they are high-efficiency designs and so on. But it doesn't know things like the part number of the waveguide, the proper use of flanking subs, the descriptions of the models, etc. So I will spend some time over the next few months fine-tuning a GPT dataset to give it this information.

The tricky thing about transformer-based large language models is that they know only words. The phrase, "a picture is worth a thousand words" falls on deaf ears here. Well, not exactly; A transformer will gobble up that phrase. And it can spit it back out to you quite elegantly but it has no idea what you are talking about. My point is that these chatbots have no "mental model" of the world. They have only mental models of words. So to teach them concepts that are best described with pictures is more difficult. You have to use your words.

More about AI, if you're interested:
[Artificial Intelligence - a brief introduction](#)

Subject: Re: Aliza

Posted by [Rusty](#) on Mon, 13 Nov 2023 16:59:12 GMT

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So far Wayne, it won't load up with my crummy laptop. Times out. That's some heady stuff,

teaching software to "think". Do the advanced programs and hardware have some sense of self, some perception of their origin? Maybe that's the goal towards autonomy in research and development of this AI. For now, I just would like some better AI interface with closed caption to be able to keep up with the spoken word in news broadcast. It seriously lags and misspells and throws out butchered words that I'd think it would be able to check. That line of software must be on the budget side.

One thing Wayne. You're like Nadine of Chuck Berry's song. Always up to somethin new.

Subject: Re: Aliza

Posted by [Wayne Parham](#) on Mon, 13 Nov 2023 20:23:53 GMT

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I've always loved neural networks, but they're finicky like people are. I think largely for the same reasons too. I think neural networks are great for things like learning minuscule muscle/motor movements needed for walking, running and acrobatics of all sorts. I also think they're good for making decisions without having all the relevant facts. But that very thing is also what makes them kind of error prone. If they're good at making inferences, that means they're good at guessing - whether right or wrong. And that isn't typically what people expect of computers.

Subject: Re: Aliza

Posted by [johnnycamp5](#) on Sat, 18 Nov 2023 16:20:47 GMT

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Subject: Re: Aliza

Posted by [Wayne Parham](#) on Tue, 26 Dec 2023 23:30:02 GMT

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Anyone tried Aliza in a language other than English? Give it a whirl!

Subject: Re: Aliza

Posted by [gofar99](#) on Wed, 27 Dec 2023 01:34:04 GMT

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Hi, not exactly OT but I was reading lately that similar "programs" use MML in PCs. The info is scarce on them and I wonder if you have any idea on how they actually work and are

implemented. I was afraid to ask Aliza for fear of a made up answer.

Subject: Re: Aliza

Posted by [Wayne Parham](#) on Wed, 27 Dec 2023 15:13:39 GMT

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There are a lot of similar technologies in chatbots these days. Most are transformers using a large language model, which is a form of recursive neural network. Some use multi-modal models, having access to text, images and sometimes sound. Those are tricky to get the individual modes to tie together but the goal is better accuracy.

Some think that will cause emergent behavior - which I agree, that's the whole point of any of these kinds of systems - but I still think we have some addition hurdles to cross. I think we need models that continuously learn rather than being trained before use. Emergent behavior is always the result of complex systems, but how close that emergent behavior resembles true intelligence requires understanding of concepts, in my opinion, and I think that will require both multi-modal approaches and a continuous learning mechanism. Only then can it gain experience and eventually, perhaps, self-reflection.

But back to your question, most of the "widgets" or automated assistants use either a rules-based approach or a limited database targeted for the subject desired. Aliza is a "generative" system, meaning its goal is to create new content based on the data it has been trained upon. I have it dialed way back at "temperature 0.0," which is a configuration setting that makes it be as definite as possible.

At this setting, if it doesn't "know" something, it will still make inferences - actually, it will always make inferences or rather try to combine words and phrases that are often used together - but the point is that the matches need to be closer than if the temperature setting were higher.

I have also started "fine-tuning" training in cases where I found it inaccurate and will continue to do that as I find need. So please provide feedback if you find inaccuracies.
