Artificial Intelligence Algorithm Implementation

Chatbot Algorithm:

HOW AN AI CHATBOT WORKS

Atrificial intelligence (AI)

Machine learning

PROCESSES

Deep learning

OUTCOMES

Natural language processing

Predictive analytics

Sentiment analytics
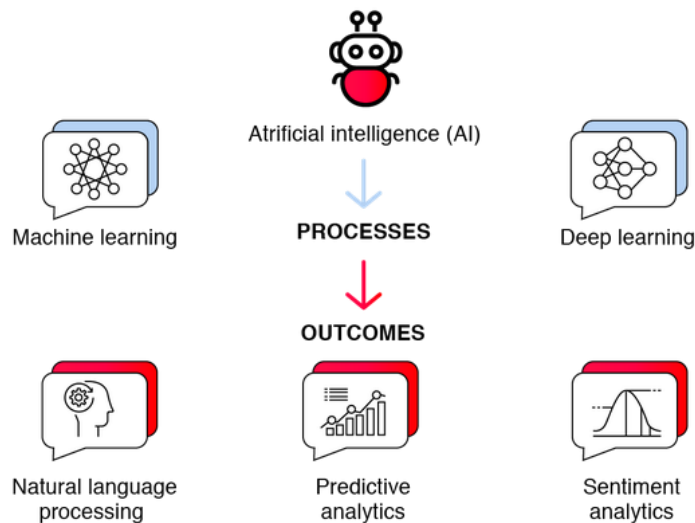
1.   *A bot is simply a computer software program that is designed to perform routine automated tasks. It is designed specifically to interact – or "chat" with – a human being through a web or mobile application.*

2. *When Artificial Intelligence programming is added to chat software, it helps the bot become more human-like. Bots utilize a database of information and pattern matching along with AI chatbot deep learning, machine learning, and natural language processing (NLP).*

3. *The chat program will look at previous conversations and documentation from customer support reps in the knowledge*

base to find similar text groupings corresponding to the original inquiry. It will then present the most appropriate answer according to specific AI chatbot algorithms.

4. Machine learning is the phrase used to describe how a computer can receive data, analyze and interpret that data to identify certain patterns, and then use that analysis to make the best logical decisions without input from a human operator.

5. A chatbot learns simply by recognizing repetitive patterns during conversations it has with humans combined with pre- determined chat scripts and a database of answers for responses. The more the program operates, the more it "learns" from the database and the more intelligent the chatbot becomes.

6. In the middle of AI chatbot, architecture is the Natural Language Processing (NLP) layer. Natural Language Processing is how the computer programs translate and mimic human conversation. It does this through predictive and sentiment analysis along with text classifications.

7. Predictive analytics combines big data, modeling, artificial intelligence, and machine learning in order to make more precise predictions about future events. Sentiment analysis explores the context of a situation in order to make a subjective determination. Specifically, as it relates to chatbot technology, a sentiment analysis can determine what a user "really means" when they type in a certain phrase or perhaps make a common spelling or grammatical mistake.

8. *Text classifications allow NLP to understand human language – including phrasing, intent, colloquialisms, etc. – and respond in kind through chat, text, or voice messaging.*

9. *All of these technologies work together seamlessly behind the facade of the chatbot in order to provide such a natural flow of messaging conversation that the user really doesn't know they are talking to a machine.*

10. ***Python:*** *Python is currently the most popular language for creating an AI chatbot, as most developers find it extremely easy to learn and work with. It's also the best choice for natural language processing, as the initial Natural Language Toolkit (NLTK) was written in Python.*

11. ***Java:*** *Since AI programming is based on the use of algorithms, Java is also a good choice for chatbot development. Java features a standard Widget toolkit that makes it faster and easier to both build and test bot applications.*

12. ***PHP:*** *If you're looking to create a chatbot that can run on any platform, PHP is the right choice. It's also popular due to the fact that it's cheaper to use since it's open-source and there is a plethora of libraries to choose from.*

13. *There are several other languages you can use as well, including Ruby, C++, and Clojure. In the end, the language you choose to develop your chatbot application will depend primarily on the development team that is doing the programming and what they are most comfortable working with.*

Conclusion:

1.Here we used this chatbot in our project which is banking and financial services in which user can be more comfortable with our and know about our services more efficiently

2.Chatbots are the new "contact us" links for business pages. They are the preferred method in which your customers want to communicate with you. If you don't currently have a chat option, you're already way behind the curve.

3.We live in an instant gratification and increasingly automated world. Gartner predicts that 85% of all customer interactions will be automated by 2020. Consumers have grown to expect an even faster, even more, personalized shopping or browsing experience. If you want to grab and hold their attention (and their loyalty), you need to be actively "chatting" them up.

4.Do you need help building an AI chatbot for your business? Or you can use our chat function for assistance! Our devs know everything there is to know about artificial intelligence and chat technology. We'll help you stay several steps ahead of the competition.

The Rise of website bots

63% of people would consider messaging an online chatbot to communicate with a business or brand - Midshare

More and more organizations will recognize the benefits of embedding a chatbot into their website. Chatbots will offer excellent user engagement and boost conversion rates. The 24/7 availability of bots will fundamentally revolutionize the live chat option in websites.

Source: Botcore