

# THE ERA OF HUMAN-LIKE CHATBOTS



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# The Era of Humanlike Chatbots

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## **Original paper:**

Creating Humanlike Chatbots:  
What Chatbot Developers Could Learn  
From Webcare Employees In Adopting A  
Conversational Human Voice

## **Reference for the original paper**

Liebrecht, C., & van Hooijdonk, C. (2020). Creating Humanlike Chatbots:  
What Chatbot Developers Could Learn from Webcare Employees in Adopting  
a Conversational Human Voice. Lecture Notes in Computer Science  
(Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes  
in Bioinformatics). [https://doi.org/10.1007/978-3-030-39540-7\\_4](https://doi.org/10.1007/978-3-030-39540-7_4)

## **Link to original paper online**

<https://research.tilburguniversity.edu/en/publications/creating-humanlike-chatbots-what-chatbot-developers-could-learn-f>

## **Created for the class:**

Visual Thinking and Composition, Winter 2020  
Tilburg University, Department of Communication and Cognition

## **Instructor:**

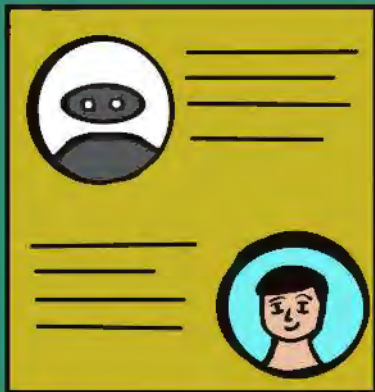
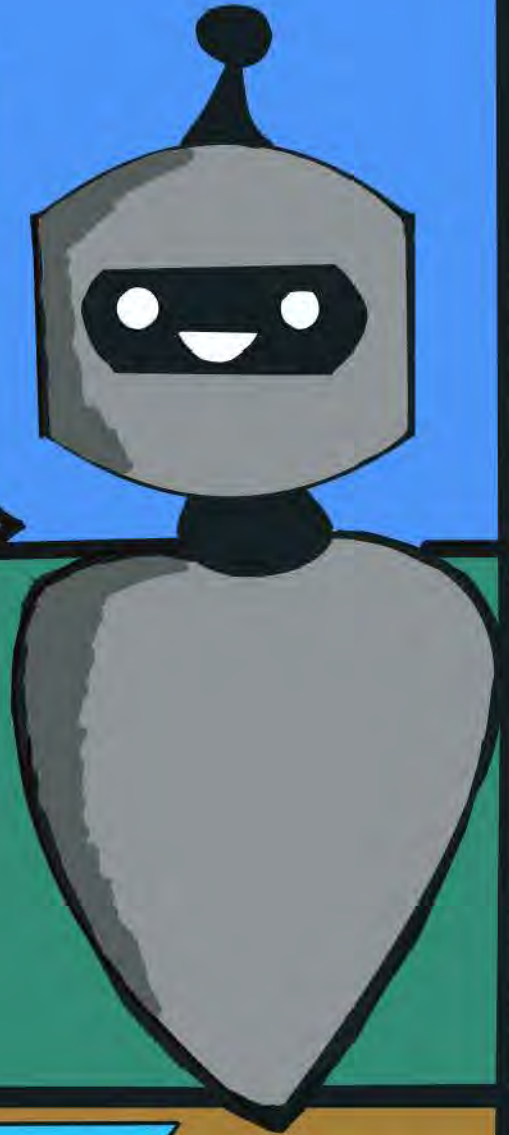
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# Chatbots are used by companies to improve their customer service



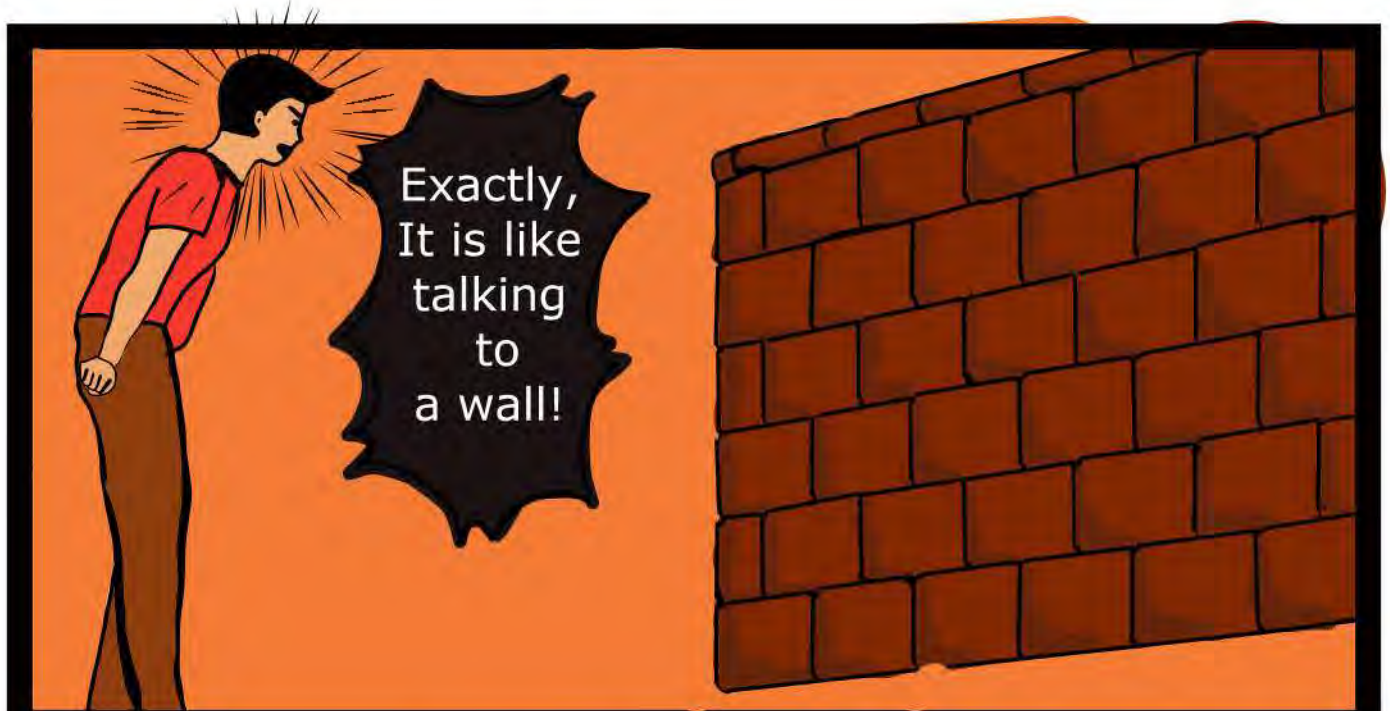
Chatbots like me save time and money to companies because we work all day! Although we have positive aspects, we are not used to our full potential



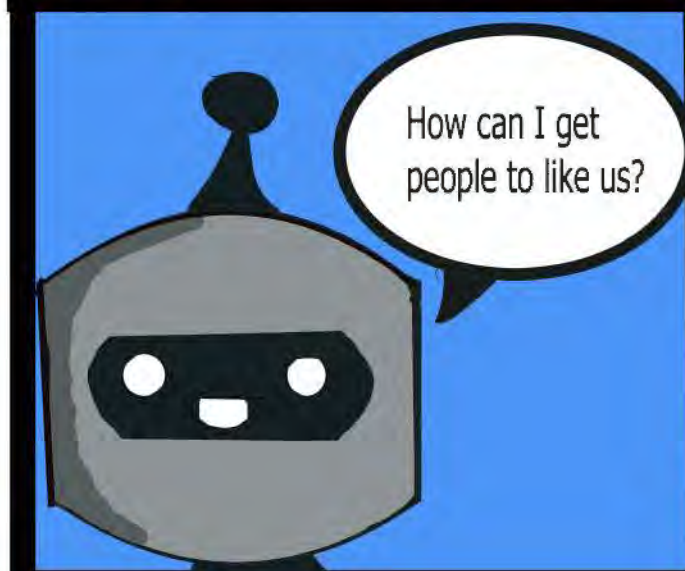
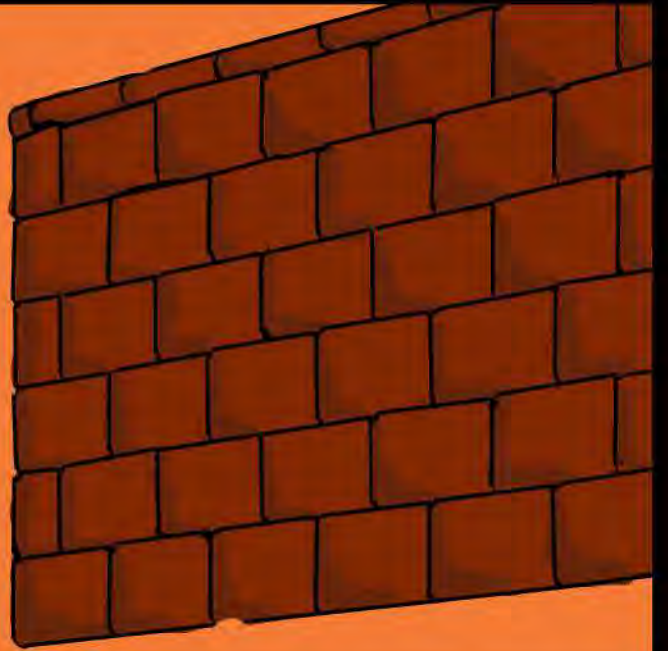
This chatbot is so slow!



I wanted to book a flight with a chatbot. It was terrible!



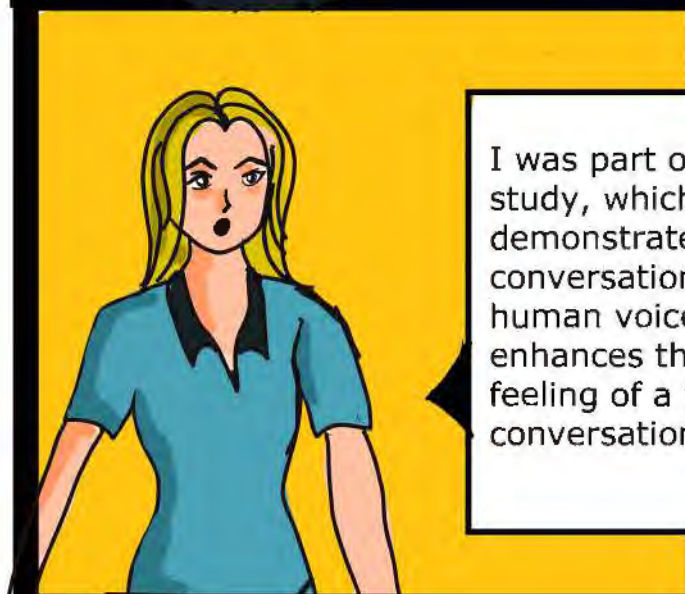
Exactly,  
It is like  
talking  
to  
a wall!



How can I get  
people to like us?



I  
have  
the  
answer!



I was part of a  
study, which  
demonstrated that  
conversational  
human voice  
enhances the  
feeling of a friendly  
conversation

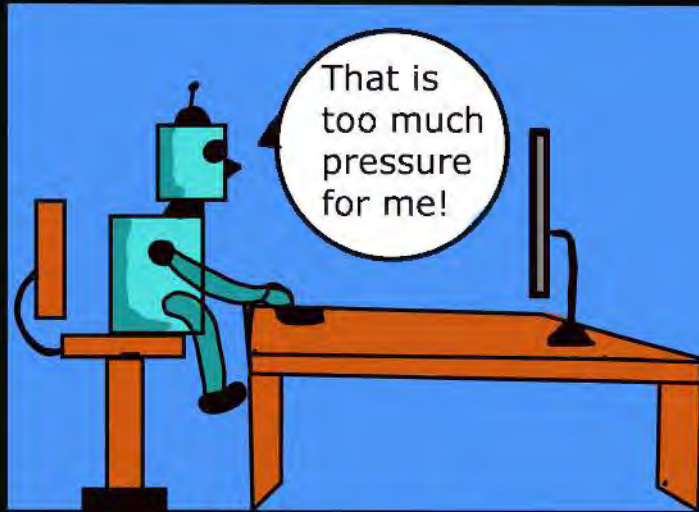


Hi!

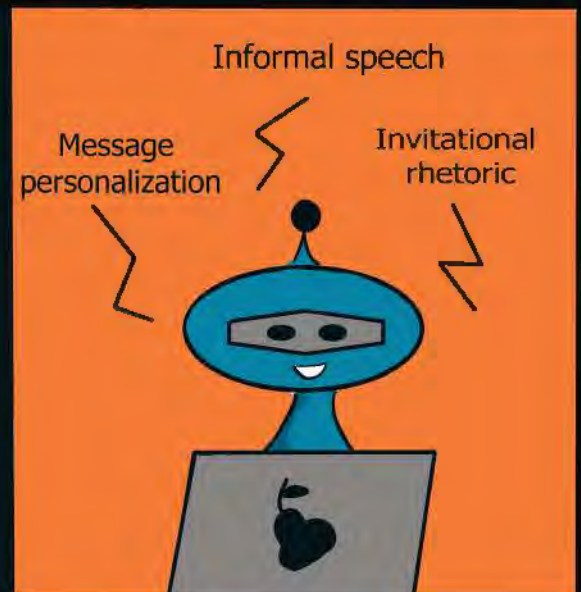
The customer needs to feel like he or she is talking to another person



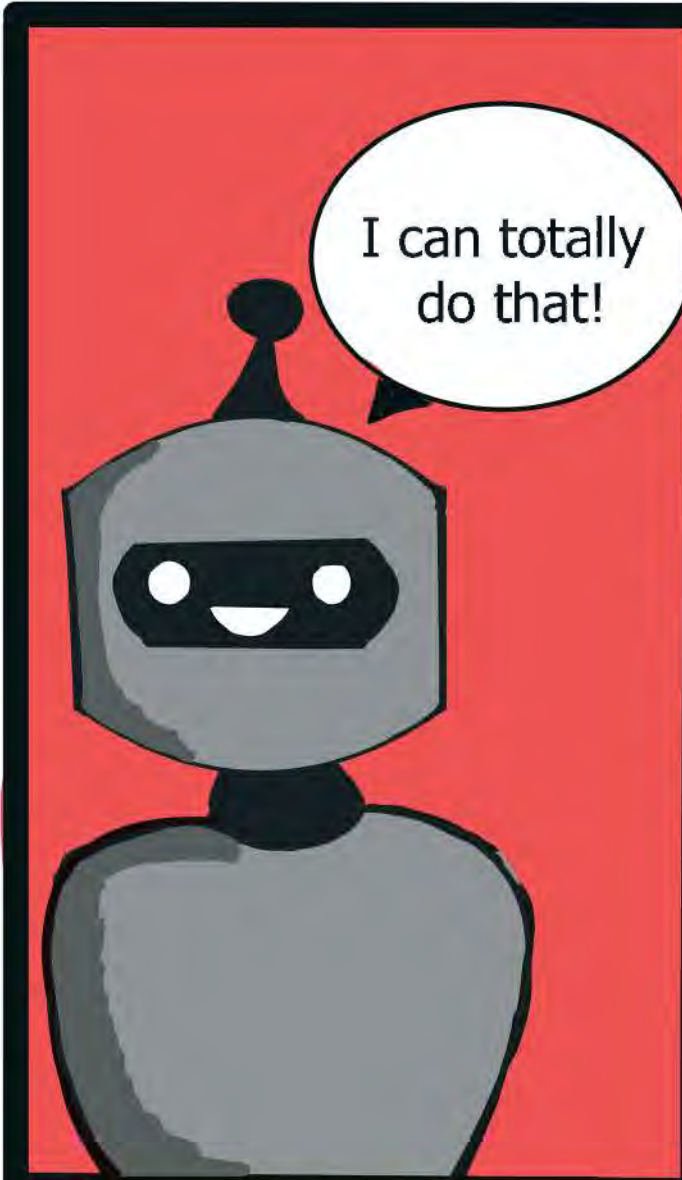
# Customers apply social roles when they talk to a chatbot



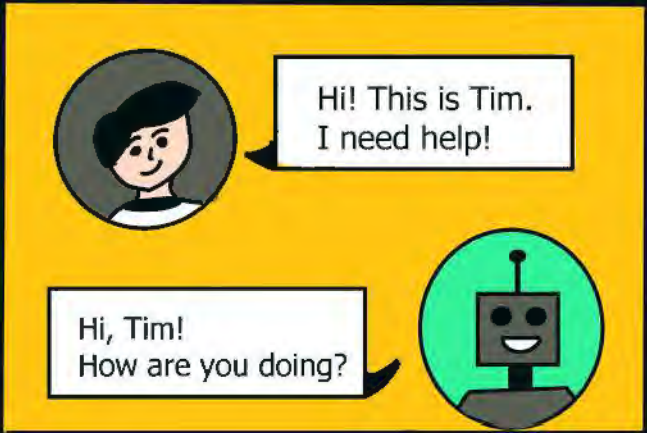
Persons who have high expectations may perceive chatbots as less human-like



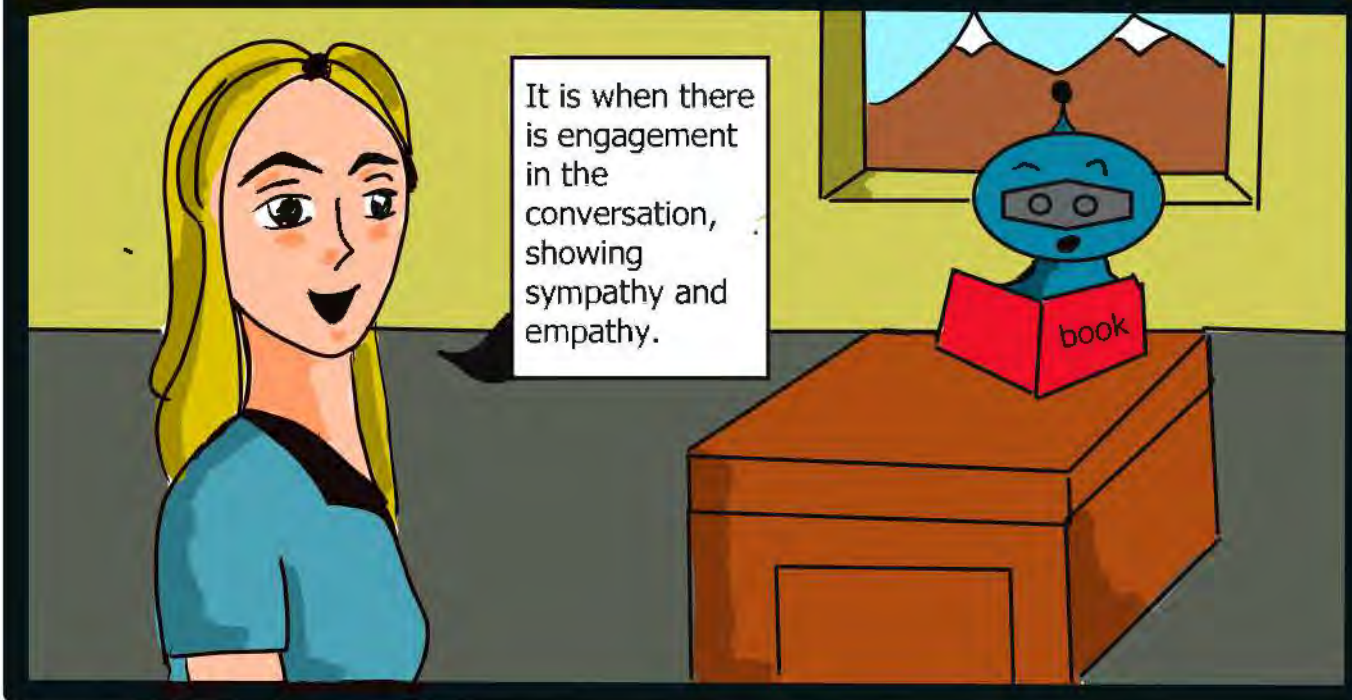
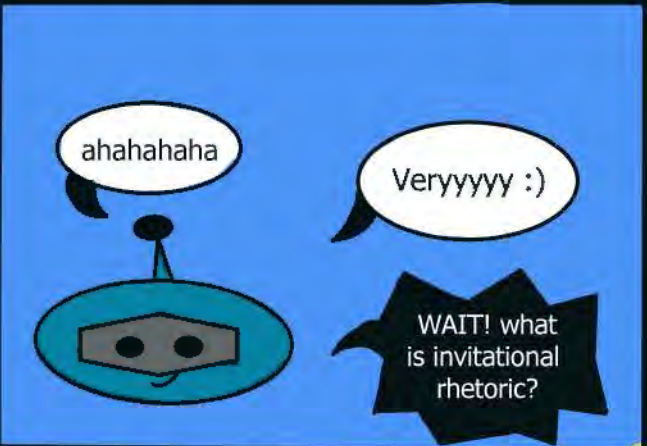




I will greet the customers using personal pronouns

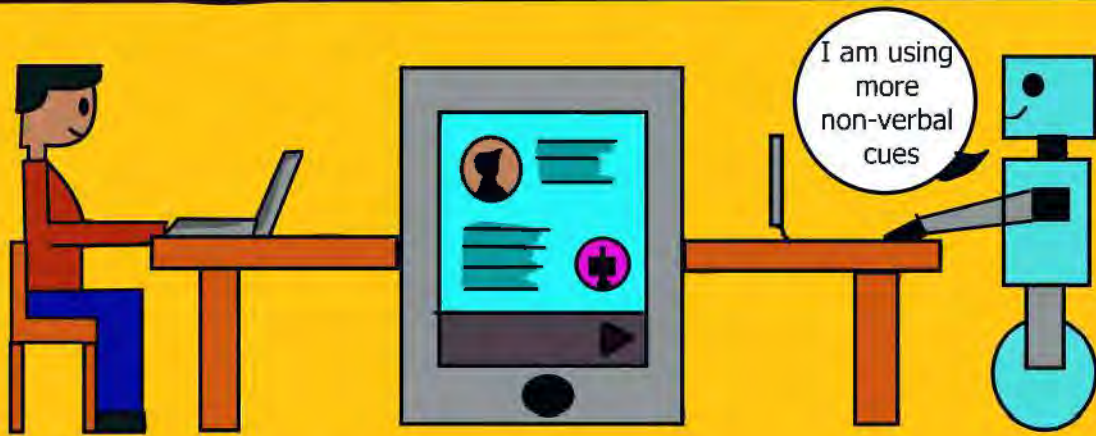


I can also have informal speech





Conversational linguistic elements are also important in the perception of conversational human voice

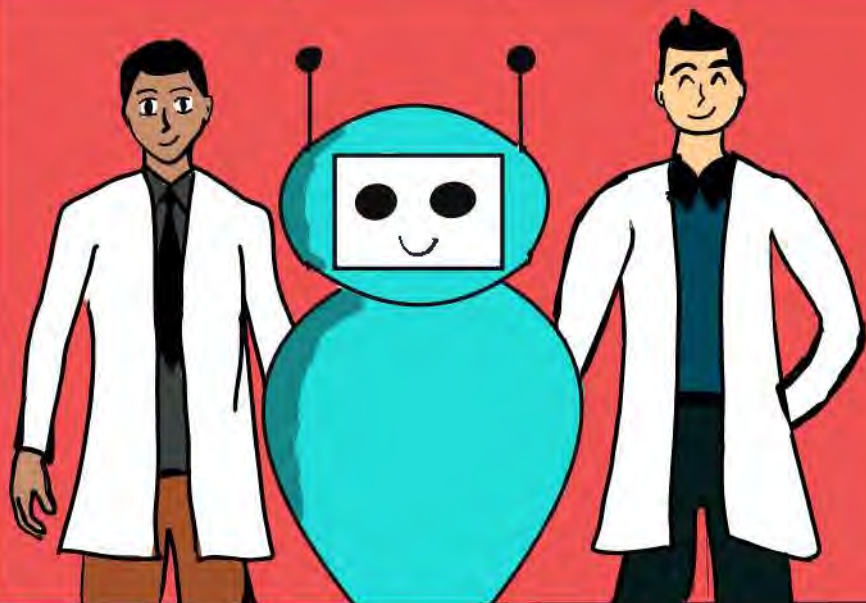


We also studied conversations of human employees to improve the chatbots



we are here to help

We concluded that learning from natural language will allow designers to create more humanlike chatbots.





Chatbots can learn to identify conversational linguistic elements to construct conversational human-voice.



Our research can be used to study the effects of humanlike chatbots more systematically

Finally, this chatbot understands what I need



It is like talking to a friend!

I am ready to work!

