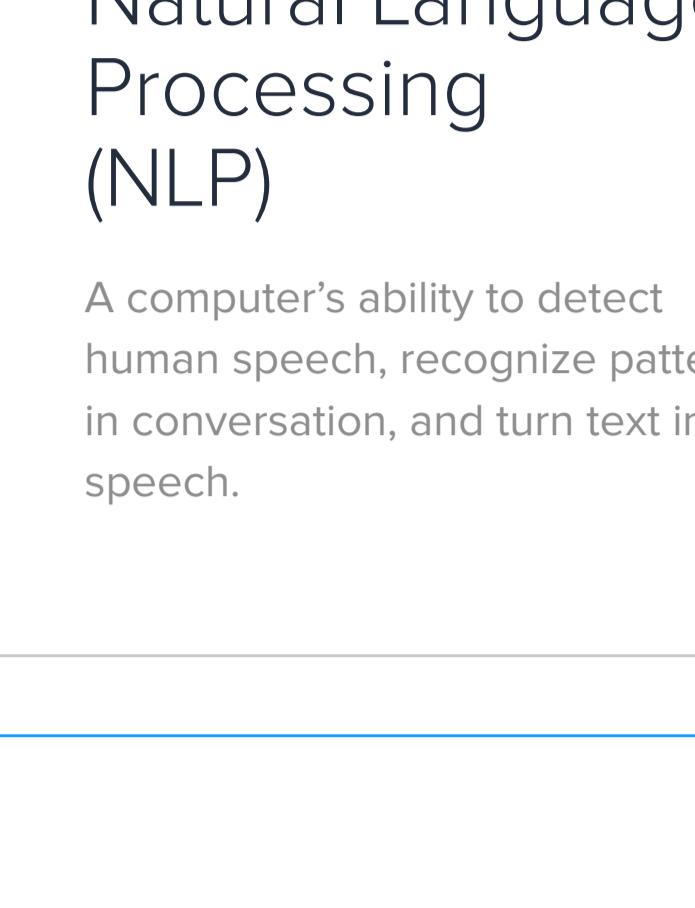


# Machine Language

## A GUIDE TO CHATBOT TERMINOLOGY

### Decision Trees

The most basic chatbots are based on tree-structured flowcharts. Their responses follow IF/THEN scripts that are linked to keywords and buttons.

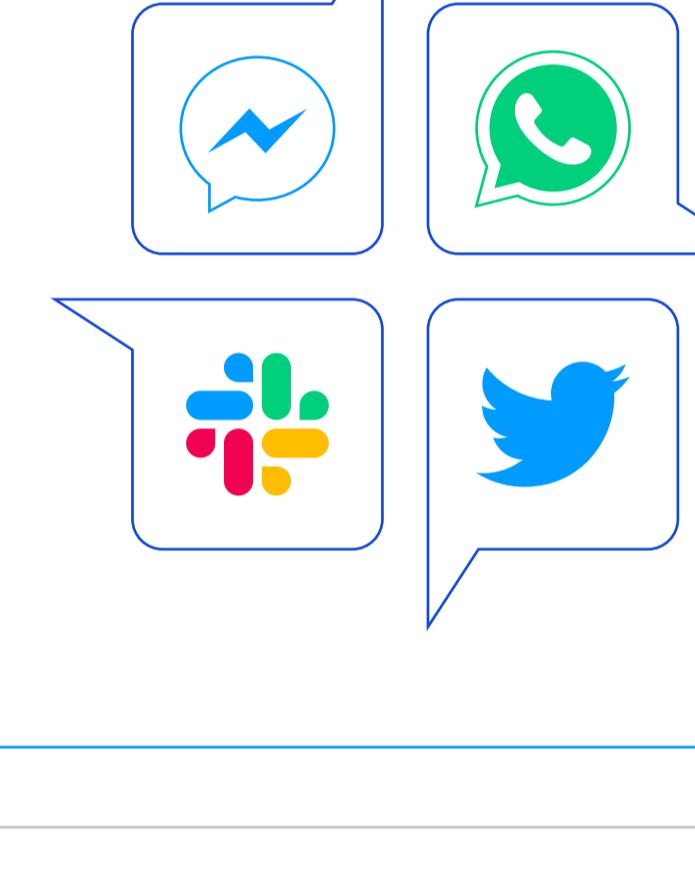


### Natural Language Processing (NLP)

A computer's ability to detect human speech, recognize patterns in conversation, and turn text into speech.

### Natural Language Understanding

A computer's ability to determine intent, especially when what is said doesn't quite match what is meant. This task is much more difficult for computers than Natural Language Processing.



**HELLO**  
**HELLO**  
**HELLO**  
**HELLO**  
**HELLO**  
**HELLO**  
**HELLO**  
**HELLO**

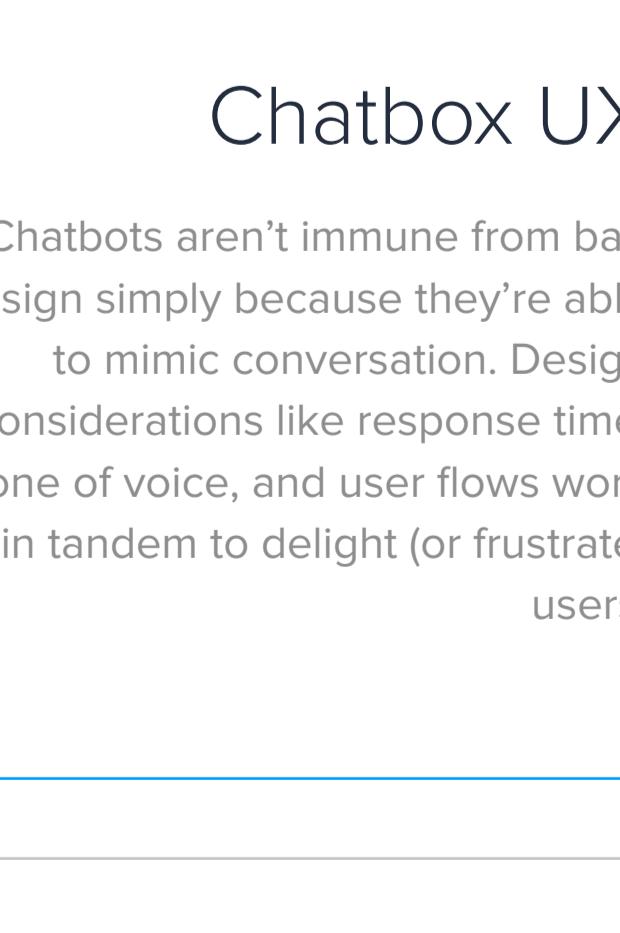
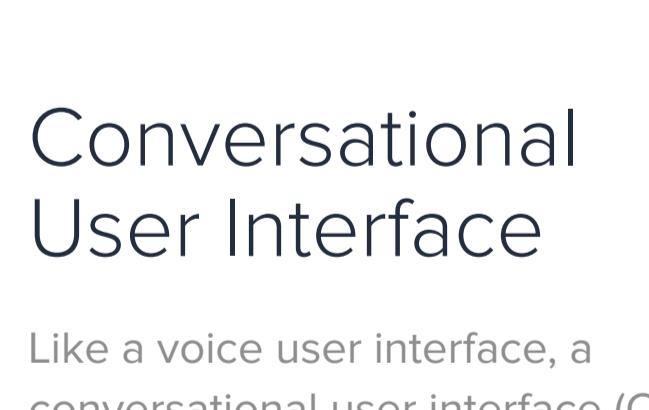
### Layered Communication

Human communication is complex. Consider the intricacies of:

- Misused phrases
- Intonation
- Double meanings
- Passive aggression
- Poor pronunciation
- Regional dialects
- Subtle humor
- Speech impairments
- Non-native speakers
- Slang
- Syntax

### Messenger Chatbots

Messenger chatbots reside within the messaging applications of larger digital platforms (e.g., Facebook, WhatsApp, Twitter, etc.) and allow businesses to interact with customers on the channels where they spend the most time.



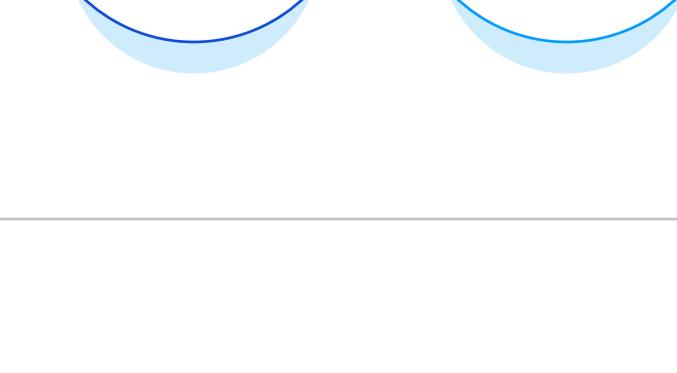
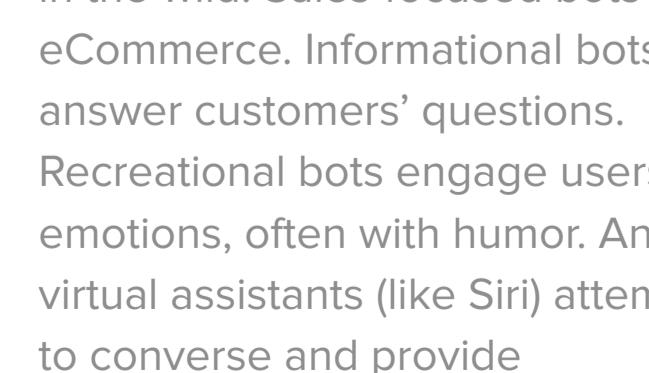
### Chatbot Design Programs

There's no reason to design a messenger bot from scratch. Chatbot design programs help designers make bots that:

- Can be used on multiple channels (social, web, apps)
- Have custom design elements (response time, contact buttons, images, audio, etc.)
- Collect payments
- Track analytics (open rates, user retention, subscribe/unsubscribe rates)
- Allow for human takeover when the bot's capabilities are surpassed
- Integrate with popular digital platforms (Shopify, Zapier, Google Site Search, etc.)
- Provide customer support when issues arise

### Voice User Interface

A voice user interface (VUI) allows people to interact with a computer through spoken commands and questions.



### Conversational User Interface

Like a voice user interface, a conversational user interface (CUI) allows people to control a computer with speech, but CUI's differ in that they emulate the nuances of human conversation. Additionally, CUI's can also be entirely text-based.

### Chatbox UX

Chatbots aren't immune from bad design simply because they're able to mimic conversation. Design considerations like response time, tone of voice, and user flows work in tandem to delight (or frustrate) users.



There are several types of chatbots in the wild. Sales-focused bots drive eCommerce. Informational bots answer customers' questions. Recreational bots engage users' emotions, often with humor. And virtual assistants (like Siri) attempt to converse and provide information on multiple topics.