

Where is the AI ...
... and how does
it work?



Are you ...



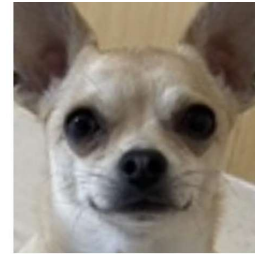
Are you ...



AI ...



AI ...



AI ...



AIML Categories

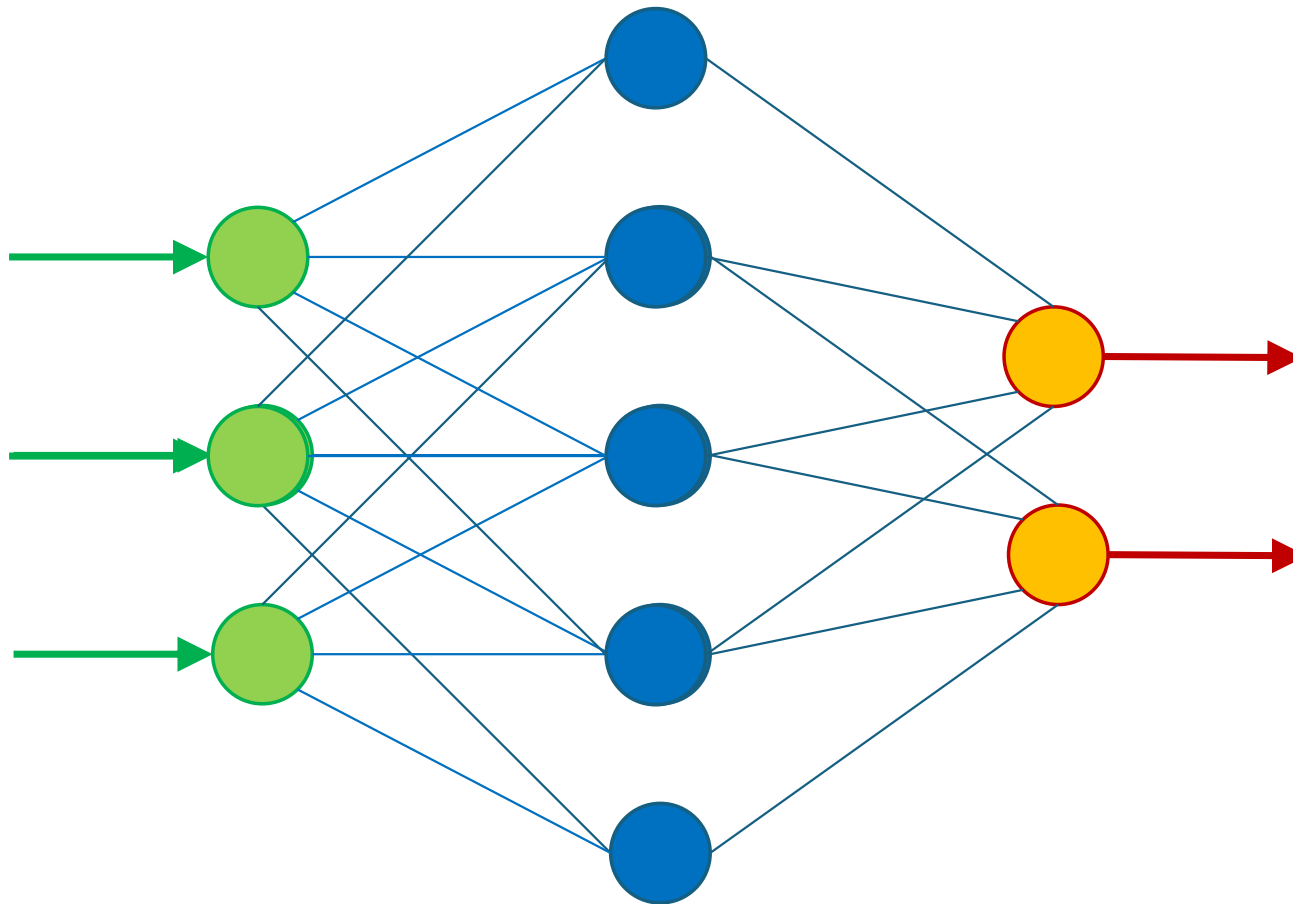
The fundamental unit in **AIML** is the

- Each **category** represents exactly **one dialogue rule**
- An **AIML** document often consists of many hundreds of such categories

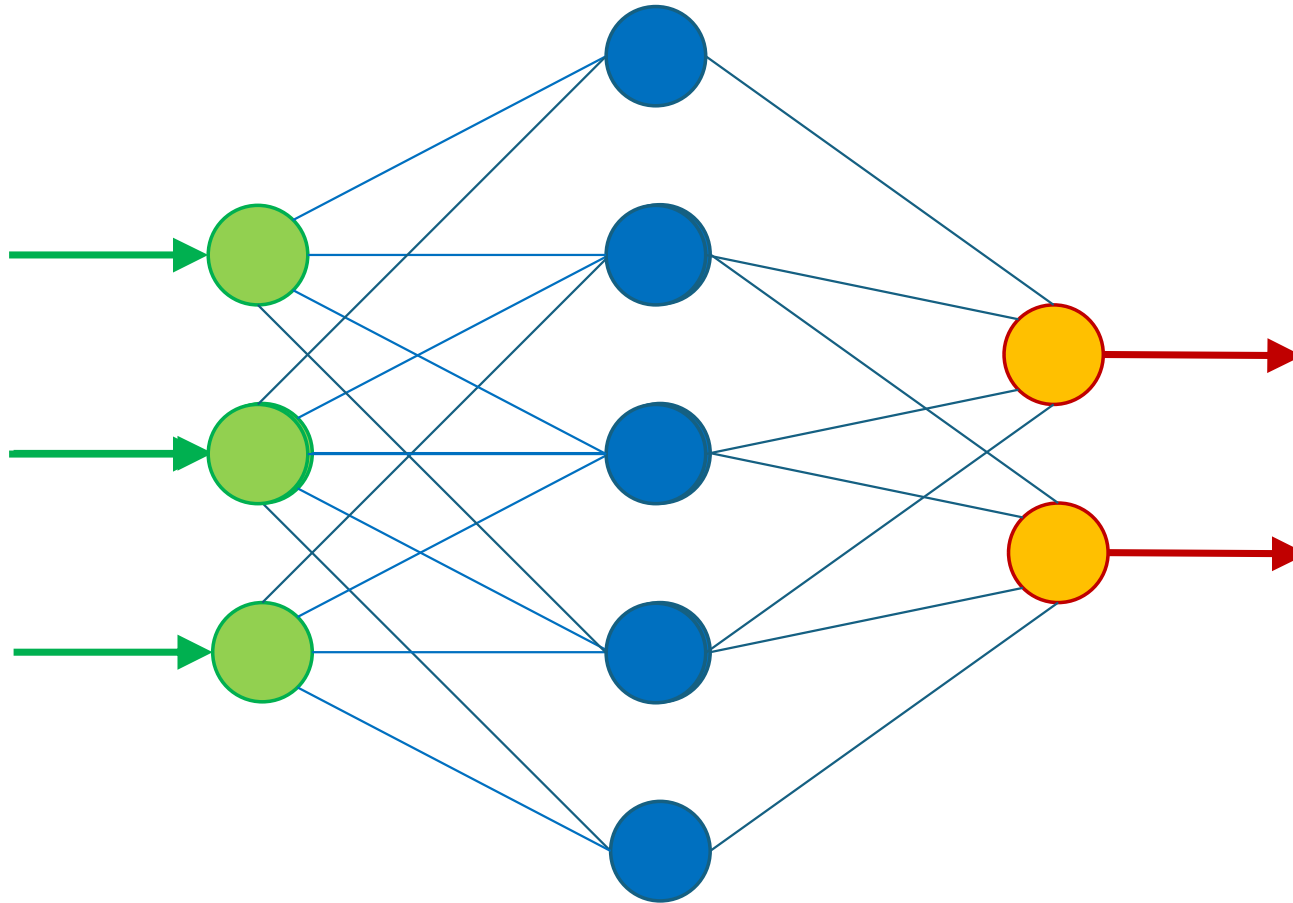
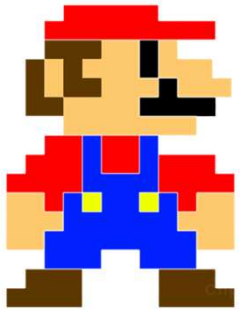
```
<category>  
  <pattern>WHAT'S YOUR NAME</pattern>  
  <template>My name is ALICE.</template>  
</category>
```



AI ... how does that work?



AI ... how does that work?



AI ... how does that work?

GHOTI ?



AI ... how does that work?

GHOTI ?

Solution (1): “Fish”



AI ... how does that work?

GHOTI ?

Solution (1): “Fish”

The <gh> should be pronounced as [f], as in “rough”, “laugh”, or “cough”.

The <o> as in “women” (plural) would correspond to an [i].

The <ti> would be pronounced as [ʃ], as in the words “nation” or “martial”.



AI ... how does that work?



GHOTI ?

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Solution (2): ?

The <gh> is pronounced as in “night” or “fight”,

the <o> as in “people”,

the <t> as in “ballet” or “gourmet”,

the <i> as in “business”.



AI ?

Artificial Intelligence Markup Language

- XML-based language for describing dialogues for
- chatbots
 - virtual assistants
 - etc.

Goal: Replicating human conversations through **rule-based dialogues**

AI systems: **Dynamic responses via statistical models or neural networks**

AIML: **Responses are explicitly defined by rules**

- This makes the responses **transparent, traceable, and easy to control**



Chatbot ... how does that work?



The name says it all...
...“Conversation Machine”

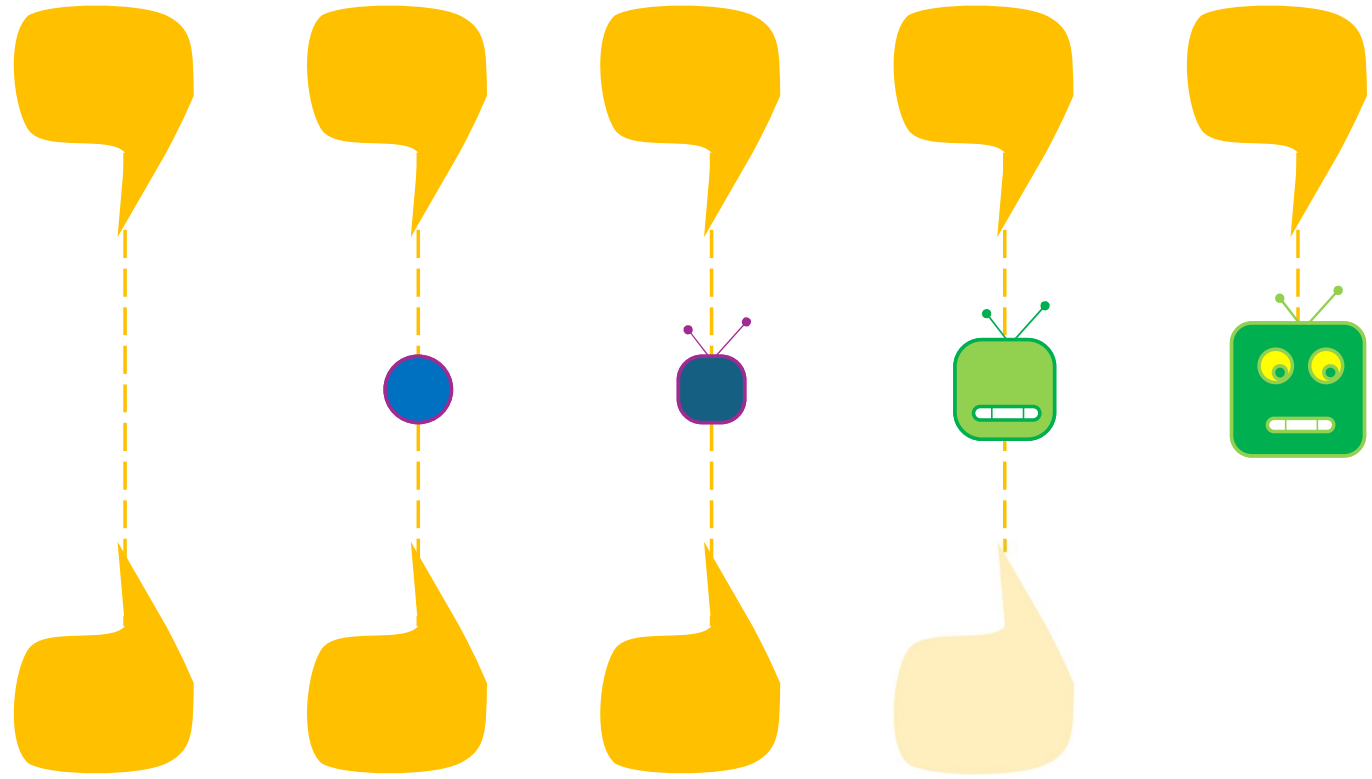
ELIZA by Joseph Weizenbaum
(1966)

```
Welcome to
EEEEEE LL      IIII ZZZZZZZ AAAAA
EE      LL      II      ZZ      AA  AA
EEEEEE LL      II      ZZZ      AAAAAA
EE      LL      II      ZZ      AA  AA
EEEEEE LLLLLL IIII ZZZZZZZ AA  AA

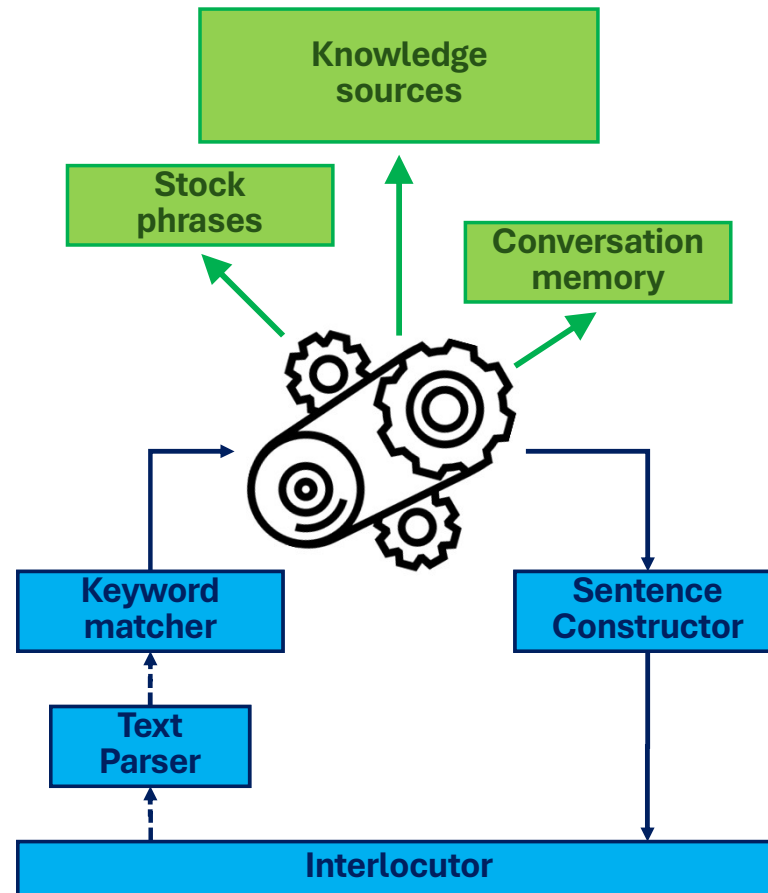
Eliza is a mock Rogerian psychotherapist.
The original program was described by Joseph Weizenbaum in 1966.
This implementation by Norbert Landsteiner 2005.

ELIZA: Is something troubling you ?
YOU:   Men are all alike.
ELIZA: What is the connection, do you suppose ?
YOU:   They're always bugging us about something or other.
ELIZA: Can you think of a specific example ?
YOU:   Well, my boyfriend made me come here.
ELIZA: Is it important to you that your boyfriend made you come here ?
YOU:   He says I'm depressed much of the time.
ELIZA: I am sorry to hear that you are depressed.
YOU:   It's true. I am unhappy.
ELIZA: Can you explain what made you unhappy ?
YOU:   █
```

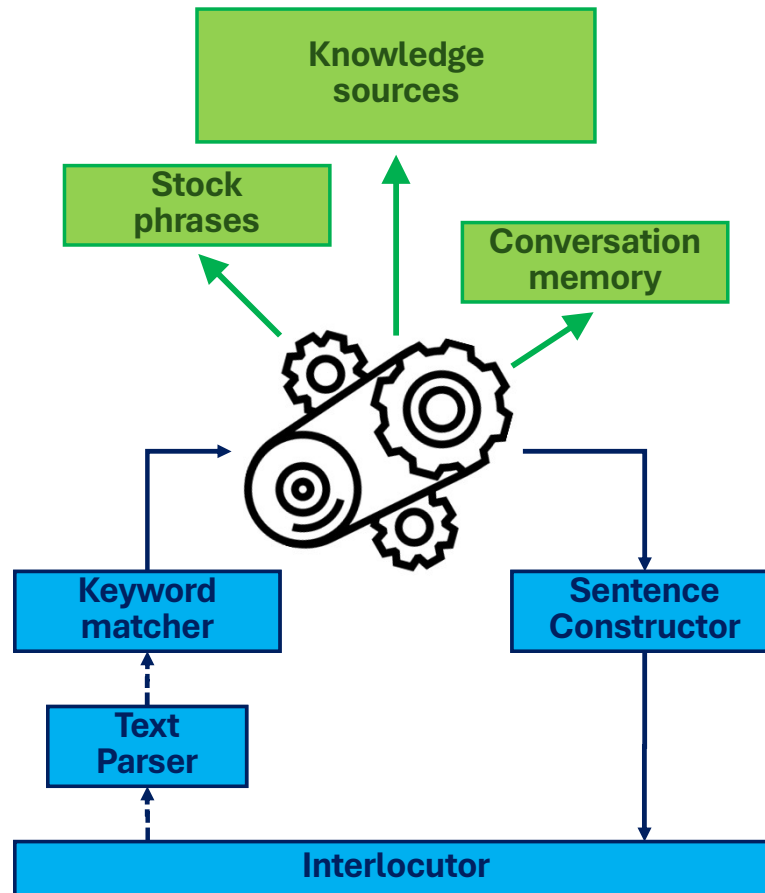
Chatbots – a vast field



Chatbot – Conversation Machine

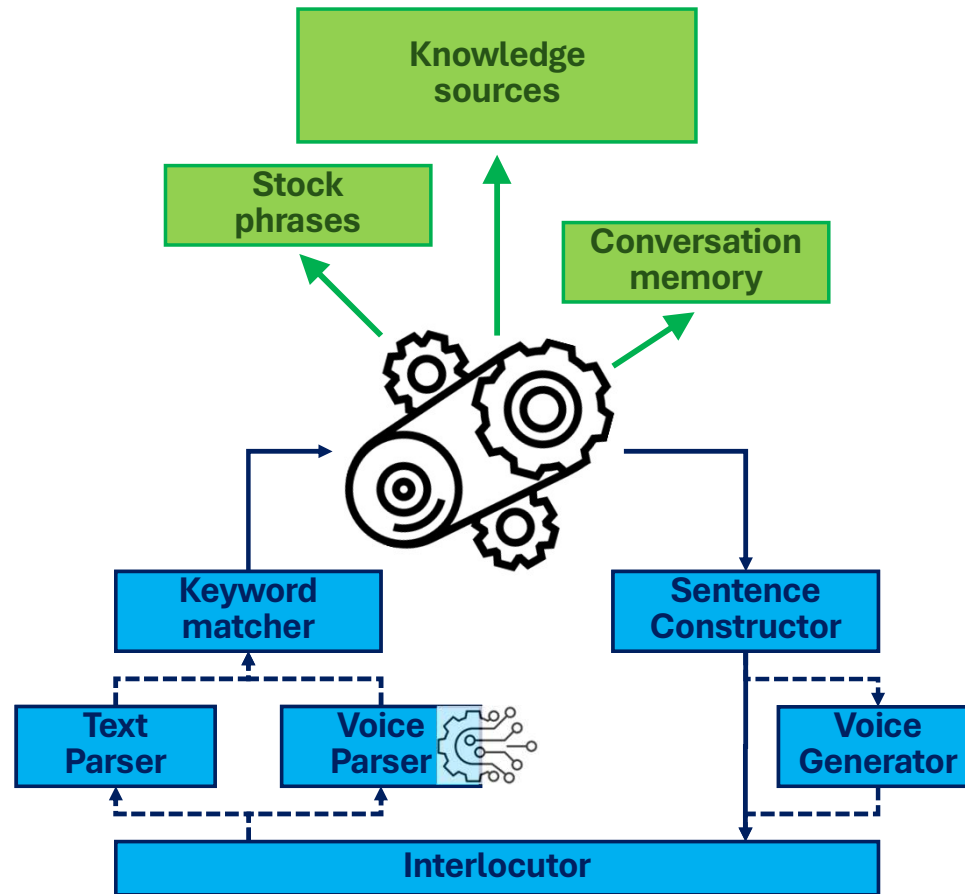


Chatbot – Conversation Machine vs. AI

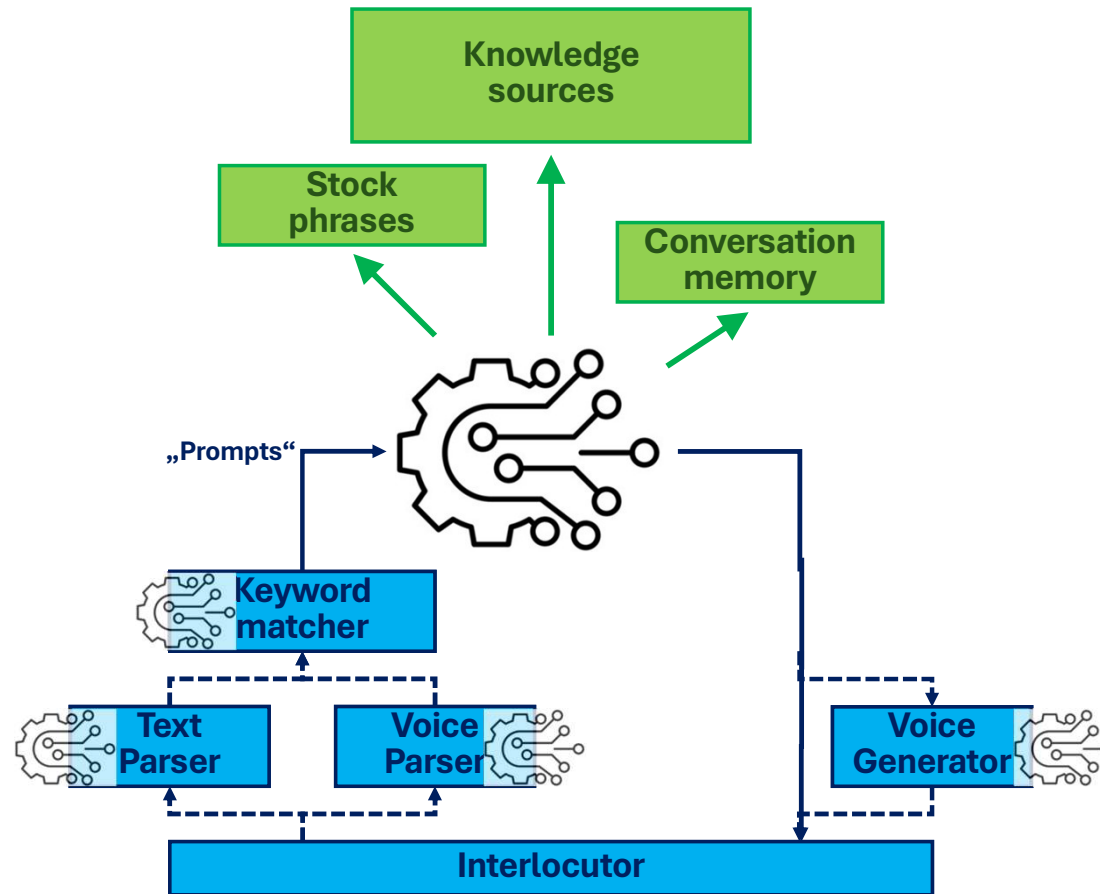


Where is the AI ?

Chatbot – Conversation Machine vs. AI



Chatbot – Conversation Machine vs. AI



Chatbot vs. Avatar vs. AI

