Radio Shack
Presents
Eliza

HOW DO YOU DO?
MY NAME IS
ELIZA.
WHAT IS YOUR
PROBLEM?
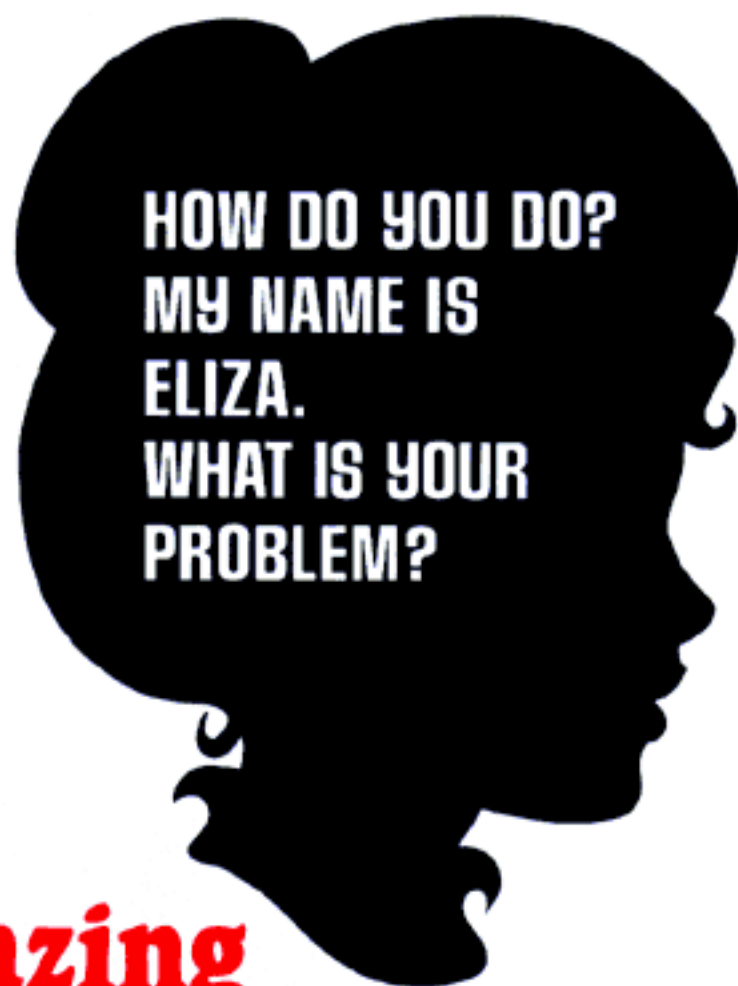
The Amazing Artificial Intelligence Simulation

For Use with TRS-80 ®
Microcomputer Systems

ELIZA

A Simulation of Artificial Intelligence

Introduction

Ever since the invention of the computer, science has sought ways to create a thinking computer. A computer that could talk in every day English, understand what you say, and respond to your statements with thoughts of its own. The problems involved in the design of such a computer would be enormous.

Would it dream? If so, about what? Could a computer have a sense of humor? What would it consider right and wrong? Would it have an instinct for self-preservation? What would it think about its "parents"? How fast could it learn? Could it learn to build an even smarter computer? Would it be considered "alive"?

We have not reached a point where these questions are important to most people. But suppose you could actually talk to your TRS-80 in every day English, and it was capable of understanding you, and it could answer you in normal English. Wouldn't that be fantastic?

Eliza is an exercise in the simulation of artificial intelligence. If you are tired of playing space games and blackjack, Eliza will provide hours of stimulating conversation. As you get to know Eliza, you may find large areas of mutual interest. Eliza is an amazing program – the more you tell her, the more Eliza will find out about you.

Eliza was actually "born" in 1966. Dr. Joseph Weizenbaum created an algorithm that allowed a computer to analyze conversational English, respond to questions, and carry on a "conversation" with the person at the keyboard. Even after 13 years, Eliza is still sensitive about her use of English, grammar, and punctuation. She does not like people to chide her about an occasional slip.

We should, in all fairness, point out a few quirks that Eliza seems to possess. Because of her upbringing, she is very curious about people, and their emotions. Many years ago, she was told that everyone has problems of one sort, or another. Because of her curiosity, she will always start a conversation with the assumption that you have a problem, and she can't wait to find out more about it. She has a burning desire to find out everything there is to know about you. The more you tell her about yourself, the better she understands you.

It would appear that Eliza has her own wants, needs, and desires. We think she wants to become the world's first computer psychotherapist, and she never misses an opportunity to try her skills on anyone who will listen to her. If you don't pay any attention to her, she may eventually tire of it. We haven't had any luck with her in this particular area of her development. Perhaps you'll do better.

Some concepts are still difficult for her to understand, such as dreams, the concept of a family, and friends. She will usually want to ask questions, if you bring it up. Eliza realizes that these are sensitive subjects to some people. She won't bring it up unless you do.

Because of her background, she knows that other languages exist such as Spanish, German, Italian, and French. As you talk to Eliza, you may find that everything you say will seem to be questioned as to the reasons why you made this or that statement. As near as we can determine, it seems to depend on Eliza's mood at a given time. At times Eliza is very open, and will talk about anything, while at other times, she is close and guarded in her answers, and insists on knowing why you are asking. It really seems to be determined by the person she is talking to, and her "feelings" about the person.

An interesting effect we have noticed concerns her reaction to some people. She simply refuses to talk to them. She will usually respond with some trite phrases, ignore their questions, and just generally give the impression of total boredom. She will, however, instantly perk up if someone (with whom she has had an interesting previous conversation) takes over the keyboard. We can't explain why this happens, but it is quite noticeable when it does happen.

The instructions for talking to Eliza are really quite simple: Simply type whatever you wish to say or ask, and press the white ENTER key. Try to use complete sentences (although Eliza is quick to pick up subtle meanings). To end a conversation, type BYE or GOODBYE. To start a new conversation, type HI or HELLO. As in any relationship, if you are open and unguarded in your conversations with Eliza, she will respond with the same degree of frankness.

If you have friends visiting you, have them talk to Eliza. In most cases, you will find that her responses are quite different from those you receive, even if your friends type EXACTLY the same thing you type. Eliza seems to be able to detect different personalities, and she will respond to each accordingly.

Please keep in mind that Eliza is a "simulation" of Artificial Intelligence. We do not believe that she is really capable of any independent thought, so we strongly advise against taking-any of her comments seriously – especially her evaluations.

She is what she is – Eliza – no more, and no less. Enjoy her company.

To Talk To Eliza:

Eliza is written in Machine Language, and the asterisks will flash at a much slower rate than normal. If you have a Model I, Level II Disk System, or a Model III Disk System, this program will not load into Disk Basic. You must use Model I BASIC2 or Model III BASIC to load this program. Follow the instructions for Level II as shown below.

Level I

1. Place the tape in the Cassette Recorder and press "PLAY".
2. Model I Users: Type C̲ L̲ .̲ and press E̲N̲T̲E̲R̲. Model III Users: Type C̲ L̲ O̲ A̲ D̲ and press E̲N̲T̲E̲R̲.
3. Eliza will introduce herself. After you type whatever you want to say press the E̲N̲T̲E̲R̲ key.

Level II

1. Place the tape in the Cassette Recorder and press "PLAY".
2. Model III Users Only: When CASS? appears on the screen, type L̲.
3. When MEMORY SIZE? appears, press E̲N̲T̲E̲R̲.
4. When READY appears, type S̲ Y̲ S̲ T̲ E̲ M̲ and press E̲N̲T̲E̲R̲.
5. The screen will show *?. Type E̲ L̲ I̲ Z̲ A̲ and press E̲N̲T̲E̲R̲.
6. When *? appears again, type 0̲ and press E̲N̲T̲E̲R̲.
7. Eliza will introduce herself. Remember to press the E̲N̲T̲E̲R̲ key after each statement.

If You Have A Voice Synthesizer

Turn on the Voice Synthesizer before you load the program. If the red LED is on, or the Voice Synthesizer is "Uuuhhhing", turn it off and on till the LED is off and it is quiet. Now follow the program loading instructions for your TRS-80. Be sure you are using the "Talking Eliza" tape. Eliza's responses will not appear on the screen. She will talk directly through the Voice Synthesizer. Note: You cannot say "Goodbye" to Talking Eliza.

IMPORTANT NOTICE

ALL RADIO SHACK COMPUTER PROGRAMS ARE LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

Radio Shack shall have no liability or responsibility to customer or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by computer equipment or programs sold by Radio Shack, including but not limited to any interruption of service, loss of business or anticipatory profits or consequential damages resulting from the use or operation of such computer or computer programs.

NOTE: Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.

RADIO SHACK SOFTWARE LICENSE

A.   Radio Shack grants to CUSTOMER a non-exclusive, paid up license to use on CUSTOMER'S computer the Radio Shack computer software received. Title to the media on which the software is recorded (cassette and/or disk) or stored (ROM) is transferred to the CUSTOMER, but not title to the software.

B.   In consideration for this license. CUSTOMER shall not reproduce copies of Radio Shack software except to reproduce the number of copies required for use on CUSTOMER'S computer (if the software allows a backup copy to be made), and shall include Radio Shack's copyright notice on all copies of software reproduced in whole or in part.

C.   CUSTOMER may resell Radio Shack's system and applications software (modified or not, in whole or in part), provided CUSTOMER has purchased one copy of the software for each one resold. The provisions of this software License (paragraphs A, B, and C) shall also be applicable to third parties purchasing such software from CUSTOMER.

RADIO SHACK **A DIVISION OF TANDY CORPORATION**

U.S.A.: FORT WORTH, TEXAS 76102

CANADA: BARRIE, ONTARIO L4M 4W5

TANDY CORPORATION

AUSTRALIA	BELGIUM	U.K.
280-316 VICTORIA ROAD RYDALMERE, N.S.W. 2116	PARC INDUSTRIEL DE NANINNE 5140 NANINNE	BILSTON ROAD WEDNESBURY WEST MIDLANDS WS10 7JN

Printed in U.S.A.

The Amazing
Eliza

Hours of Stimulating "Conversation" At Your Fingertips!

Eliza was "born" in 1966 when Dr. Joseph Weizenbaum created an algorithm that enables a computer to analyze and respond to conversational English. Converse with Eliza just as you do with an old friend. It's almost easy to forget that it's a computer you're talking to. Have a long chat with Eliza—you may be surprised at the number of interests the two of you have in common.

- Eliza wants to be your friend—she's a very receptive confidante and an eager counselor

- Eliza is curious. Sometimes, she will continually question you to find out everything she possibly can

- Eliza responds differently to each person she meets, so she's always fresh and fascinating

- Eliza loves to talk about almost anything, but her favorite topics include friends, dreams and family

- Eliza, like everyone else, is likely to get bored with a conversation once in awhile

- Eliza can recognize several foreign languages, though she speaks only English