**Level 1 Eliza**

1. Research the “ELIZA Computer Therapist Program”. Summarize your answers to the following:
   1. What does the program do?

ELIZA is a piece of software that attempts to simulate the conversation of a Rogerian psychotherapist. Of course, ELIZA does not pass a Turing test. If you interact with it the conversation does not last too long before it becomes obvious you are talking to a machine.

* 1. When and why was the program created?

It supposedly had been created in the 1960s to demonstrate how superficial human to computer communications was at that time.

* 1. How does the program work?

It mimics a human-to-human conversation.

1. Use an on-line version of the ELIZA program to see what it is like.
   1. Open the URL : <http://psych.fullerton.edu/mbirnbaum/psych101/Eliza.htm>
   2. Begin by talking about your feelings (just like if you were talking to a guidance councillor).
   3. After a while, try to trick the program.
2. In what ways did the program seem like you were talking to a real person? What was a strategy used by the program to keep the discussion going?

Eliza responds like a real person by asking follow up questions related to what I entered into the program.

1. In what ways could you tell that it was not a real person? What were some of the weaknesses of the program?

However, Eliza does not know how to respond to questions about herself, which makes it evident that Eliza is a program and not a real person. In addition, Eliza sometimes makes no sense when responding, in terms of grammar and overall understanding of what the other person is trying to communicate

1. If you had your friend talk to ELIZA but did not tell them it was a program, how long do you think it would take for them to figure it out? Explain your answer.

I believe that after the first two questions, any of my friends would be able to see the repetitiveness in the program and the lack of understanding. I think this way because this was my own experience with the program, and it wasn’t long before Eliza started to make no sense.

**Level 2 Turing Test**

1. Research the “Turing Test”. Summarize your answers to the following:
   1. What is the Turing Test?

a Turing Test is a method of inquiry for determining whether or not a computer is capable of thinking like a human being.

* 1. Who was Alan Turing?

Alan Turing was a British scientist and a pioneer in computer science. During World War II, he developed a machine that helped break the German Enigma code. He also laid the groundwork for modern computing and theorized about artificial intelligence.

* 1. How does the Turning Test work?

During the test, one of the humans functions as the questioner, while the second human and the computer function as respondents. The questioner interrogates the respondents within a certain subject area, using a specified format and context. After a preset length of time or number of questions, the questioner is then asked to decide which respondent was human and which was a computer. The test is repeated many times. If the questioner makes the correct determination in half of the test runs or less, the computer is considered to have artificial intelligence, because the questioner regards it as "just as human" as the human respondent.

* 1. How is the Turing Test different from other Artificial Intelligence tests?

The Turing test does not directly test whether the computer behaves intelligently. It tests only whether the computer behaves like a human being. ... The Turing test requires that the machine be able to execute all human behaviours, regardless of whether they are intelligent.

1. Visit the Ted Ed website to learn more about the Turing Test.
   1. Watch the video at: <https://ed.ted.com/lessons/the-turing-test-can-a-computer-pass-for-a-human-alex-gendler>
   2. Complete the on-line test at: <https://ed.ted.com/lessons/the-turing-test-can-a-computer-pass-for-a-human-alex-gendler#review>
2. Has any computer AI passed the Turing Test? Research this question and report on your results.

While there have been two well-known computer programs or chatbots, claiming to have passed the Turing Test, the reality is that no AI has been able to pass it since it was introduced. Turing, himself, thought that by the year 2000 computer systems would be able to pass the test with flying colors.

1. Do you think that you have ever been fooled by an on-line computer AI program? Explain your answer.

No, although there are many “chat bots” out there, I don’t believe I have ever been fooled intro communicating with one.

**Level 3 Article reviews**

Pick any three (3) out of the following four (4) articles to read and review. Answer the questions that are specific to each article.

Article 2: Social Media Bots

Read the following article:

<https://www.usnews.com/news/healthiest-communities/articles/2018-07-24/how-social-media-bots-could-compromise-public-health>

1. How many social media accounts are estimated to be AI bots?

Researchers estimate there are [tens of millions](https://arxiv.org/pdf/1703.03107.pdf) of bots – automated accounts sometimes posed as real people – on Twitter, with their presence also felt on Facebook and other social media platforms.

1. What is the purpose / objective of these AI bots?

They can be used to spread misleading or blatantly false information with the intent of influencing how people think or act, and they're relatively simple to make – or to buy, for those simply looking to inflate their follower counts.

1. How could a bot be used to increase the number of people vaping or smoking?

If harnessed to promote certain products – such as e-cigarettes, diet pills and supplements – Allem says the sheer volume of bot-generated posts could make it seem like those behaviors or products are more popular than they are. That, in turn, could normalize poor or misinformed health decisions. Those fears are grounded in signs of a growing reality. Most of Allem's research centers around posts about e-cigarettes and vaping on Twitter, and in [one study,](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5752967/) he found that bots were significantly more likely than real people to post hashtags about smoking cessation and e-cigarettes in the same tweet, indicating bots were pushing vaping as a safe alternative to traditional tobacco cigarettes – a common claim despite the [unknown long-term health effects](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm) of e-cigarettes.

1. How could a bot be used to increase the public concern about getting vaccinated?

In February, the APHA's Facebook page posted a [meme](https://www.facebook.com/AmericanPublicHealthAssociation/photos/a.190674431802.156872.110414461802/10156227793116803/?type=3&theater) about flu shots that was inundated with anti-vaccination comments. Megan Lowry, a communications specialist at the organization, suspects the comments were posted by bots because of how quickly the meme was "plagued" with "anti-vaccination misinformation." That's feasible, Allem says, as bots can be programmed to automatically reply to Facebook posts.

1. What is a “sockpuppet”?

"sockpuppets" – fake or deceptive accounts managed by real people – or so-called trolls, meaning accounts managed by people who post provocatively to anger and distract others.

Article 3: Automated Journalism

Read the following article:

<https://www.bbc.com/news/business-42858174>

1. What are some of the topics of the articles produced by the robo-journalists owned by the Press Association (PA)? How long and how detailed are these articles?

Automated stories about [smoking during pregnancy](http://www.derbytelegraph.co.uk/news/health/shocking-figures-show-more-mums-954055), [recycling rates](http://www.thetelegraphandargus.co.uk/news/15776454.Why_do_Bradford_households_recycle_less_than_five_years_ago_/), or [cancelled operations](http://www.herefordtimes.com/news/15708920.Health_Trust_improves_as_cancellations_stop/) have all found their way online and in print. As part of a trial, the PA has begun emailing selected machine-generated stories, no more than several paragraphs or so in length

1. “At this stage” what are the limitations of robo-journalists? What jobs do human journalists do that cannot yet be done by robo-journalists?

At this stage, the system simply amplifies the work human journalists do, some of whom are involved in developing the system's output. The automated part is currently limited to trawling through the data, something that would take humans far longer to do.

1. What happened when the LA Times used a robo-journalist to report on an earthquake?

Last June when the newspaper published a report about a 6.8 magnitude quake off the coast of California - it was actually a record of a 1925 earthquake that had been published by the USGS in error. The LA Times' automated story had appeared just a minute after the USGS published its outdated report. In this case, being first to the news was definitely a disadvantage.

1. What are some of the “easier” tasks that robo-journalists are used to produce articles for?

Many publishers are using automation to release interesting data quickly - from election results to official figures on social issues. There are other uses, though. One agency in The Netherlands uses an algorithm to rewrite stories with simpler language, for a news wire aimed at children.

1. Do you think this article was written by a robo-journalist? Explain your answer by giving examples of both why and why not.

No, I believe this article was written by a person. The reason I believe it was written by a person is because robo-journalists are currently only being used to release interesting data quickly, not a detailed analysis like this article.

Article 4: Automated Journalism

Read the following article:

<https://digiday.com/media/washington-posts-robot-reporter-published-500-articles-last-year/>

1. What is the name of the Washington Post’s robo-journalist and what was its first assignment?

The Washington Post started using its homegrown artificial intelligence technology, Heliograf, to spit out around 300 short reports and alerts on the Rio Olympics.

1. How can robo-reporting expand the audience for newspapers?

In its first year, the Post has produced around 850 articles using Heliograf. That included 500 articles around the election that generated more than 500,000 clicks — not a ton in the scheme of things, but most of these were stories the Post wasn’t going to dedicate staff to anyway. For the 2012 election, for example, the Post did just 15 percent of what it generated in 2016.

1. How can robo-reporting help human journalists?

Media outlets using AI say it’s meant to enable journalists to do more high-value work, not take their jobs. The AP estimated that it’s freed up 20 percent of reporters’ time spent covering corporate earnings and that AI is also moving the needle on accuracy. “In the case of automated financial news coverage by AP, the error rate in the copy decreased even as the volume of the output increased more than tenfold,” said Francesco Marconi, AP’s strategy manager and AI co-lead.

The Post is also trying to figure out how to use Heliograf to help its journalists with substantive reporting. During the election, it used Heliograf to alert the newsroom when election results started trending in an unexpected direction, giving reporters lead time to thoroughly cover the news. Gilbert wants Heliograf to play a more ambitious role in the next election. He also sees the potential for Heliograf to do legwork for reporters in other ways, like spotting trends in financial and other big data sets. “We think we can help people find interesting stories,” he said. Heliograf also can be deployed to update ongoing stories like weather events in real time, providing a service to readers.

1. Are smaller news organizations using robo-reporting? What are the benefits to smaller organizations?

No, however, ultimately media companies will need to figure out how to go beyond previous ways of journalism. There are economic benefits as well as time benefits to robo-reporting.

1. Do you think this article was written by a robo-reporter? Explain your answer by giving examples of both why and why not.

No, I believe this article was written by a person. The reason I believe it was written by a person is because robo-journalists are currently only being used to release interesting data quickly, not a detailed analysis like this article.

**Level 4 Will Artificial Intelligence Take My Job (SOP)**

To prepare for the final summative you should reflect on how artificial intelligence may impact the future job market. (i.e. The jobs and careers that will be available when you graduate.)

Write ***two*** Supported Opinion Paragraphs for ***two*** job topics as follows:

1. Select two topics from the list of jobs below. If you have an idea for another job please clear it with Mr. Nestor before your proceed.

2. Write a Supported Opinion Paragraph for each job topic

a. The question to be answered is “Will Artificial Intelligence Take My Job”

b. Some themes to consider are:

i. Describe your job as it currently exists (or as it is traditionally). Focus on details that could be automated.

ii. Provide some examples of how your job can be (or has been) changed by computer technology in general.

iii. Provide some examples of how your job can be (or has been) changed by artificial intelligence specifically.

iv. Describe your job as it will exist in the future as it changes due to computer technology.

v. What education will be required to do this job more effectively

3. Read the following articles to get some ideas about what you should include in your SOP.

<https://www.forbes.com/sites/forbestechcouncil/2018/02/26/artificial-intelligence-will-take-your-job-what-you-can-do-today-to-protect-it-tomorrow/#430f57bf4f27>

<https://www.forbes.com/sites/theyec/2018/07/06/do-you-fear-artificial-intelligence-will-take-your-job/#7fb127a611aa>

4. Guidelines for writing a supported opinion paragraph (SOP)

· <http://schools.peelschools.org/sec/fletchersmeadow/studentlife/OSSLTprep/Documents/Sample_%20Writing%20a%20Supported%20opinion%20paragraph.pdf>

**Job Topic Suggestions:**

|  |  |  |
| --- | --- | --- |
| Truck Driver | Taxi Driver | Delivery Person |
| Store Checkout Clerk | Restaurant Cook / Waiter | Retail Salesperson |
| Real Estate Agent | Financial Advisor | Bank Teller |
| Family Doctor | Medical Specialist / Surgeon | Fitness Instructor |
| Artist | TV / Radio Personality | Actor |
|  |  |  |

**Retail Workers**

When discussing jobs that may be taken over by artificial intelligence in the near future, retail workers are definitely among those who are at high risk of losing their jobs for many different reasons. Retail workers job consists of welcoming customers by greeting them, offering them assistance, directing customers by escorting them to racks and counters and suggesting items. However, these are tasks that artificial intelligence could easily consume for the following reasons. First of all, the technology to replace retail workers with assisting customers already exists, and is continuing to become better over time . Secondly, customers expect information instantly. Most retail workers aren’t compensated enough or educated enough to provide instant information. On the other hand, robots would be able to automatically answer questions for customers. Therefore, for higher efficiency, retail workers are likely to lose their jobs to artificial intelligence for many reasons

**Truck Drivers**

With the constant development of technology and artificial intelligence, it is questionable whether certain jobs will exist for humans in the future. For instance, the job of a truck driver, among other driving jobs, are in fact likely to replaced by automated technology as early as 2030 according to some researchers. This is evident as self-driving technology is getting better by the day. For example, a self-driving truck company, Otto, was created by former google employees. This company’s system was successfully tested when a self driving truck delivered items efficiently. Another reason why this job will be replaced by artificial intelligence, is for higher efficiency and safe operation of vehicles. Truck drivers, among other driver jobs, are not always the safest option. With self-driving technology getting better by the day, there is a concern that truck drivers will be replaced by more efficient artificial intelligence. As for future aspects for those in the truck driving business, social experts have argued that their job skills can be shifted and/or evolved into other sectors.