The Threat of Artificial Intelligence By Dan Bishop, 2/20/2024

Artificial Intelligence became a household topic in 2021 when OpenAI, a software company, released its latest version of Chat-GPT on the Internet, free for anyone to use. In one fell swoop, users could receive responses to their online queries that sounded like they came from a human being, as opposed to receiving a list of potential websites to surf for answers to their questions. OpenAI's use of machine learning, deep learning, large language models, and layered neural networks, together with the vast knowledge base of the Internet and computing hardware capable of quadrillions of calculations per second, provided the perfect platform for the perfect storm.

The average user, myself included, was deeply impressed with the program's capabilities. But it soon became clear that the program's developers were awed by the program as well. The deep machine learning had altered the program through algorithmic evolution so much that the experts themselves could not explain its inner workings. Some were ecstatic, claiming that the Human-machine interface, the so-called singularity, was in sight. Others were apoplectic, concerned they had crossed the threshold beyond which Humans were no longer in control. For them, a potential apocalypse loomed.

AI, intelligent robots, and android adversaries have been the grist of science fiction for many years. In most cases, it is portrayed as a threat to Humanity that needed to be subdued, if not destroyed. This made perfect sense. Who is entertained by nambly pambly machines that change diapers and wash dishes? The threat of terrible mayhem and extinction at the (mechanical) hands of hoard of emotionless robots is great box-office and the grist of nightmares. Humans have thus been conditioned to imagine the worst possible scenario.

Many experts in the AI arena present some convincing arguments to suggest that such a potentiality is quite far off, possibly even unlikely to ever occur. The basis for their reasoning lies in the concepts of sentience, consciousness, and purpose (goal setting). The large language models that have so impressed the world lack these traits. The programs are mindless builders of text using statistical and probabilistic evaluations of word constructs based on the vast library of Internet documents. There is no path in their evolution that could lead them to make sense of the tangle of words they devise to create a response to your queries. In other words, they are, and will remain, mindless machine-driven tools. AI in that sense is not a threat. At least not in its current form.

That said, however, there is one aspect to modern AI that poses a grave threat to humanity. As a tool, it is indifferent to who wields it. In the hands of nefarious individuals, it can be as destructive as a sledgehammer in a China shop. A carefully designed query can produce a response that distorts reality or tells an outright lie. The propaganda potential of misinformation, distortions, and lies produced by AI can have a devastating impact on individuals, groups, and the society at large. AI's more recently developed ability to create images, recordings, and even videos in response to simple queries takes this threat to new, more frightening levels. The term 'Deep Fake' has been coined to describe this new threat, something so carefully constructed that it looks or sounds legitimate.

A successfully functioning democracy depends on an active, well-informed citizenry. Truth matters. Facts matter. So, how can the average person defend against an onslaught of misinformation? The answer is not simple. But here are a few weapons you can employ.

- 1. A healthy skepticism of every piece of information that comes your way, regardless of how respected the source may be, is essential. Assume everyone has an agenda and wishes to persuade you to follow their lead.
- 2. Vigilance and critical analysis of everything you see and hear that seems designed to sway your point of view. Does the piece you are reading or hearing make sense in light of fact-based reality? If it seems too bizarre to be true, it probably is fake. (Example: Pedophiles in the basement of a pizzeria.)
- 3. Search for evidence that would point to image manipulation. Clues might be inappropriate or misaligned background, fuzzy sections that should have more definition, inappropriate or missing reflections and shadows, poorly resolved or crazy small details (such as six fingered hands).
- 4. Read widely from sources that have a reputation for reliability and truthfulness. But even there, employ the practices described above at all times. Assume that everyone has an agenda.
- 5. Be aware of your own biases. Misinformation that confirms your own biases can be as destructive as misinformation that opposes them. Propaganda comes in all flavors, but its end result is the destruction of truth.

Discerning the truth is becoming more and more difficult. The continuing development of AI makes this ever more challenging. This is the real threat AI poses today. Fortunately, unlike AI, we have the ability to reason, using judgement and discernment two wade through the tide of information that floods our way each day. We must never forget to use it.