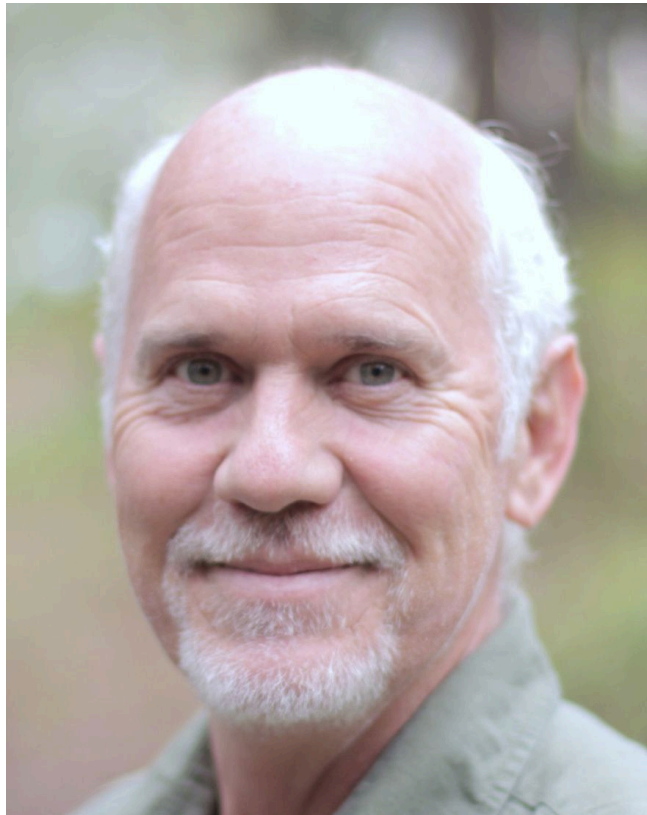

In My View: Artificial intelligence and ChatGPT

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Artificial Intelligence (AI) and ChatGPT have been in the news lately. What does this mean?

Artificial Intelligence is defined as the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision making and translation between languages.

ChatGPT, which stands for Chat Generative Pre-trained Transformer, is a large language model based chatbot developed by OpenAI, launched on November 30, 2022, which enables users to refine and steer a conversation towards a desired length, format, style, level of detail, and language used. Successive prompts and replies, known as prompt engineering, are considered at each conversation stage as a context.

What Can It Do?

I had the idea that I would test out ChatGPT to see if this AI program could produce a column that would match my writing style. Then I wondered if I could coax ChatGPT to provide a critical analysis of the harms caused by AI. Would the readers be able to tell the difference?

I concluded it would be better to write this column the old-fashioned way. There is a lot I don't understand about artificial intelligence, but I will highlight a few news stories I found on this subject.

San Francisco Dream

The San Francisco Chronicle headline "AI hype draws thousands to S.F." (9/14/23) got my attention.

The Chronicle reported that 40,000 visitors from around the globe converged on San Francisco for the Dreamforce Convention, the self-proclaimed biggest AI event in the world. Dreamforce is expected to generate \$89.3 million in local spending.

"One of the biggest draws was OpenAI CEO Sam Altman talking with conference organizer Salesforce's CEO Marc Benioff about artificial intelligence. Benioff has repeatedly highlighted San Francisco's emergence as an AI epicenter." There is a lot of money to be made from artificial intelligence applications, but at what cost?

Iowa Nightmare

While AI enthusiasts dance in San Francisco, back in Iowa they are paying the fiddler. A story in the Times Standard, "AI behind ChatGPT built with a lot of water" (9/10/23) exposes the environmental impacts from developing artificial intelligence.

"The cost of building an artificial intelligence product like ChatGPT can be hard to measure. But one thing Microsoft backed OpenAI needed was plenty of water pulled from rivers in central Iowa to cool a powerful supercomputer as it helped teach its AI systems how to mimic human writing."

"All of that computing takes a lot of electricity and generates a lot of heat. To keep it cool on hot days data centers need to pump in water, often to a cooling tower outside its warehouse sized buildings."

Who knew?

"Few people in Iowa knew about its status as the birthplace of OpenAI's most advanced language model GPT-4. Microsoft has been amassing data centers in West Des Moines to power its cloud computing services for more than a decade. Its fourth and fifth data centers are due to open there late this year."

West Des Moines's mayor said, "Microsoft was attracted to the city's commitment to building infrastructure. Microsoft committed a staggering sum of money through tax payments that support that investment, but they were pretty secretive on what they're doing out there."

"Most people are not aware of the resource usage underlying ChatGPT, claims a researcher at UC Riverside who is trying to calculate the environmental impact of AI products such as ChatGPT. He estimates that ChatGPT gulps up to 16 ounces of water every time you ask it a series of 5 to 50 prompts or questions."

AI Pitfalls

A related article in the Times Standard, “Using artificial intelligence in the workplace” (9/10/23) described the pitfalls of the improper use of AI. Limitations of using AI-generated content include:

“1) Facts and statistics given by the AI can be wrong, not up-to-date, or are constantly changing and will always need to be double-checked.”

“2) Employees must not feed into the AI query any proprietary company or personally identifiable information which is absorbed and reshared within the AI software to be accessed by other users.”

AI Experiment

As I was researching Artificial Intelligence, a pop-up ad invited me to participate in a new generative AI experiment, Search Generative Experience (SGE). They wanted me to agree to a privacy policy and disclaimer.

“When you interact with SGE, Google collects data around your usage, queries, and location to provide, improve, and develop Google products and services and machine learning technologies. Some of this data is stored in a manner that is not associated with your Google account, and may be read, processed, or annotated by human reviewers to help with quality and improve our products.”

“Generative AI is experimental technology and is for informational purposes only. Quality, accuracy, and availability may vary. Don’t rely on generative AI outputs as medical, legal, financial, or other professional advice.” I declined the invitation.

AI Harms Workers

The Writers Guild of America (WGA) went on strike May 2. Among their demands, WGA is calling on the Alliance of Motion Picture and Television Producers to regulate the use of material produced using AI. Disney is reportedly studying how to employ AI to write scripts.

The Screen Actors Guild went on strike July 14, partly out of concern that they will be replaced by AI. Big streaming platforms are said to be planning to pay actors once for their image or voice. With the aid of AI, a digital scan could be used in perpetuity for various TV and film productions.

ChatGPT or Me

Time will tell whether society will benefit from this new technology. It was tempting to use artificial intelligence to write this column, but in the end, I decided not to rely on ChatGPT. Or did I?

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