L'usage de tout système électronique ou informatique est interdit dans cette épreuve.

Rédiger en anglais et en 400 mots une synthèse des documents proposés, qui devra obligatoirement comporter un titre. Indiquer avec précision, à la fin du travail, le nombre de mots utilisés (titre inclus), un écart de 10% en plus ou en moins sera accepté.

Ce sujet comporte les 4 documents suivants :

— un dessin de Patrick Chappatte provenant du site *Cagle cartoons*, réalisé en 2021 ;
— un extrait d'un article de Marietje Schaake publié sur le site de *Financial Times*, le 2 octobre 2023 ;
— un extrait d'un article de Aaron Pressman publié sur le site de *The Boston Globe*, le 9 mars 2023 ;
— un extrait d'un article de Polly Curtis publié sur le site de *The Guardian*, le 28 juillet 2023.

L'ordre dans lequel se présentent les documents est arbitraire et ne revêt aucune signification particulière.

By Patrick Chappatte, *Cagle cartoons*, October 12, 2021.

When it comes to AI and democracy, we cannot be careful enough

By Marietje Schaake, *Financial Times*, October 2, 2023

Next year is being labelled the "Year of Democracy": a series of key elections are scheduled to take place, including in places with significant power and populations, such as the US, EU, India, Indonesia and Mexico. In many of these jurisdictions, democracy is under threat or in decline. It is certain that our volatile world will look different after 2024. The question is how — and why.

Artificial intelligence is one of the wild cards that may well play a decisive role in the upcoming elections. The technology already features in varied ways in the electoral process — yet many of these products have barely been tested before their release into society.

Generative AI, which makes synthetic texts, videos and voice messages easy to produce and difficult to distinguish from human-generated content, has been embraced by some political campaign teams. A controversial video showing a crumbling world should Joe Biden be re-elected was not created by a foreign intelligence service seeking to manipulate US elections, but by the Republican National Committee.

Foreign intelligence services are also using generative AI to boost their influence operations. My colleague at Stanford, Alex Stamos, warns that: "What once took a team of 20 to 40 people working out of [Russia or Iran] to produce 100,000 pieces can now be done by one person using open-source gen AI".

AI also makes it easier to target messages so they reach specific audiences. This individualised experience will increase the complexity of investigating whether internet users and voters are being fed disinformation.

While much of generative AI's impact on elections is still being studied, what is known does not reassure. We know people find it hard to distinguish between synthetic media and authentic voices, making it easy to deceive them. We also know that AI repeats and entrenches bias against minorities. Plus, we're aware that AI companies seeking profits do not also seek to promote democratic values.

Many members of the teams hired to deal with foreign manipulation and disinformation by social media companies, particularly since 2016, have been laid off. YouTube has explicitly said it will no longer remove "content that advances false claims that widespread fraud, errors, or glitches occurred in the 2020 and other past US Presidential elections". It is, of course, highly likely that lies about past elections will play a role in 2024 campaigns. [...]

There are steps we can take to prevent this new technology from causing unpleasant surprises in 2024. Independent audits for bias and research into disinformation efforts must be supported. AI companies should offer researchers access to information that is currently hidden, such as content moderation decisions. International teams should study the elections taking place this year, such as those in the Netherlands, Poland and Egypt, to understand how AI plays a role.

When it comes to AI and elections, I believe we cannot be careful enough. Democracies are precious experiments, with a growing set of enemies. Let us hope that 2024 will indeed be the "Year of Democracy" — and not the year that marks its decisive decline.

The Boston Globe

Are chatbots useful tools, game changers, or a threat to democracy? All of the above, AI experts say.

By Aaron Pressman, *The Boston Globe*, March 9, 2023

Dear ChatGPT,

Wow, congratulations on becoming the fastest-growing app ever — 100 million users in two months? Very impressive.

And I can see why. You're clever at crafting stories, you're quick to marshal facts, you sound more like a person than any bot I've ever seen. You may have a future answering e-mails, prompting new ideas for articles, or even dreaming up bedtime stories. That's already happening.

But you're also making me nervous. Like, very nervous. Sometimes your facts are made up. At times, you've gotten insulting and even threatening. And now I'm worried you and other conversational AI systems will be put to nefarious purposes, helping kids cheat in school, polluting social media with more convincing misinformation, or flooding public discourse with a biased point of view.

All of this suggests the tech industry may be moving too fast to be able to distinguish between safe uses and dangerous applications, according to a half-dozen experts in AI and security interviewed by the Globe. As evidence, look no further than how Microsoft's public test of a version of ChatGPT in its Bing search engine went so quickly off the rails. The bottom line, these experts said, is that business leaders — along with ethicists and regulators — need to be much more careful about adding this emerging technology to every application in the world.

"We need way more scrutiny of these models because they're getting adopted so fast," said Rana el Kaliouby, who was a cofounder of Boston AI startup Affectiva and is now deputy chief executive of Swedish AI company Smart Eye. "This is not in the research lab anymore."

Chatbot developers must take more care in what information they are using to train the apps and how they are applied to real world problems, she added. [...]

One key issue: ChatGPT and other bots can sound authentic but are easily led astray. That's because the software programs do not simply retrieve a set of facts from an established repository the way a search engine does, or use grammatical rules to build their answers. Instead, they mainly compare patterns of words seen online with the words typed by the user and then use statistical probabilities to guess which words they should say next.

Not surprisingly, some of the errors are big — and consequential. Google parent Alphabet's stock lost $100 billion last month after a demo of its upcoming chatbot included false information about the James Webb Telescope. [...]

"It learned how to make language, and language can be used to make fiction and nonfiction," noted computer scientist Stephen Wolfram said. "And, you know, it doesn't really distinguish between those."

Still, Wolfram sees value in putting chatbots to work on mundane tasks like answering his voluminous e-mail. Trained on his prior correspondence, a bot might do a good job responding to basic queries. But Wolfram frets that a hostile e-mailer might manipulate the app to reveal his secrets, as well. [...]

Meanwhile, startups are raising money and developing new applications for marketing, communications, and gaming. Some are already using chatbots' ability to create coherent sentences and paragraphs to help write children's books, and short stories. [...]

But however well-designed they are, conversational AI bots could be put to more nefarious uses.

Security researcher Bruce Schneier and data scientist Nathan Sanders at Harvard's Berkman Klein Center for Internet and Society have warned of AI chatbots as a threat to the democratic process. For one, bad actors could use the bots to further flood social media with disinformation. Going a step further, they said, chatbots could be used to overwhelm congressional offices or regulatory agencies with fake but hard-to-detect advocacy letters. [...]

Sanders pointed out that human lobbyists already conduct misleading campaigns at times, but AI apps could supercharge the damage. "It's expensive to hire human lobbyists in every state of the union if you want to have an effect on state legislatures across the country, but it's trivial to scale something like ChatGPT," he said. [...]

Chatbots can also be trained to imitate the speaking style of particular publications or individuals. That opens another avenue for both useful and criminal applications. A chatbot trained on a user's own material could answer e-mails (as in Wolfram's example), make appointments, or perhaps argue with bill collectors. [...]

But crooks have already used AI apps to imitate the voice of executives and steal from corporate coffers. Adding chatbots to the mix could magnify the criminal possibilities to include mass-scale but personalized manipulations, spreading false stock tips to manipulate a share price, or defaming a political candidate with false accusations across the Internet. [...]

Artificial intelligence is powering politics — but it could also reboot democracy

By Polly Curtis, *The Guardian*, 28th July, 2023

The YouTube clip I return to most often is David Bowie being interviewed by Jeremy Paxman on Newsnight in 1999. Bowie is talking about what the internet might do: "I don't think we've even seen the tip of the iceberg. I think that the potential of what the internet is going to do to society, both good and bad, is unimaginable. I think we're on the cusp of something exhilarating and terrifying." [...]

At the time of that Bowie interview I was writing a university dissertation titled Freedom of Speech in Cyberspace: the Challenge the Internet Poses to the Constitution of the United States. It was a heady time. The peak of internet utopia, with tech idealists promising that the decentralising nature of the internet would radically reform power dynamics, and democracy could be reborn.

Fast forward 25-odd years and we know the opposite has happened: truth and trust have been eroded, democracy has failed to reform for the digital age and the relationship between those in power and those who elect them is strained to breaking point. It's at this moment that we are seeing the proliferation of generative AI, and understandably the response has been a mixture of hysteria and hope.

The hysteria about killer robots risks masking the real societal impacts that industrial revolutions inevitably have, sifting winners and losers, and disrupting ways of living in more subtle and sometimes pernicious ways. But there *is* hope for democracy in the AI revolution — if we put the right guardrails around it.

If we make AI work for democracy, then in 10 years' time our information ecosystems could be vastly improved to support democratic decision-making. We could train AI to value verified information, and serve it in ways that make the most complex information more accessible to more people.

Politicians could be more trusted to do the right thing by people, because they've learned new ways to involve people in decision-making. AI citizens' assemblies could help people and politicians to navigate through the trade-offs required to tackle the big problems. These concepts are not entirely outlandish. [...]

But this will only happen if we make it happen. Because right now the incentives to develop generative AI are all commercial, with investors steering the development of the technology in ways that threaten to further leave democracy behind — not least because the talent, expertise and infrastructure follows the money, rather than where it could be used for common good. [...]

Without focusing explicitly on the potential for AI to improve democracy — or at least do no harm — it will most probably corrupt. Distrusted information will proliferate, further eroding trust. But without explicitly updating our democracy to encompass more participatory activities that could be facilitated through these technologies, we will increasingly be left in a system that is centuries out of date, trying to govern in a world that moves at completely different speeds and in completely different ways. We have to learn this time.