The Role of Artificial Intelligence Techniques in Spreading Rumors and Fake News, and Their Effect on National Security

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Abstract:

The study aims to monitor the role of artificial intelligence techniques in spreading rumors and fake news and revealing their impact on national security.

The study used the survey method on random samples of fake images of presidents and some famous characters spreading on social media platforms. It also used a questionnaire form on samples of journalists, media professors, and artificial intelligence experts to monitor their opinions toward the study topic and get results about the effect of artificial intelligence techniques on national security.

The study employed the public sphere theory, which confirmed that technological developments and the appearance of social media platforms facilitated the dissemination of fake news and opened the sphere for that, so it can easily harm national security. The survey and questionnaire findings also revealed that Facebook and YouTube are the most popular platforms for disseminating false information. These fake news stories are frequently spread to support governmental objectives, gain popular sympathy, and serve the interests of particular political parties or individuals.

Also Some AI programs, such as Midjourney, Copilot, AI Studio, Prompts, and Dall-E, were responsible for fabricating the majority of the fake news.

Questionnaire form Findings:

- The study sample agreed that artificial intelligence techniques help increase fake news because some AI techniques are easy to use in fabricated photos.
- The study sample agreed that political news_ particularly presidential news_ is the most frequently faked,
- The study sample agreed that it is necessary to spread the real news in governmental media, raising awareness of the dangers of using artificial intelligence technologies.

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- Most of the study samples said university youth are the most needed to be aware of the dangers of artificial intelligence techniques.
- The study sample mentioned the measures that countries must take to protect their national security against electronic crimes and fake news through continuous awareness campaigns, seminars and workshops for digital media education, implementing strict laws against cybercrime perpetrators, rumor mongers, and anyone who fakes images, videos, and audio, and increasing awareness, transparency, and immediate and direct response to rumors.
- Most of the study samples said fake news can harm national security.
- There is a statistically significant correlation between the rate of using social media for artificial intelligence techniques in fabricating news and spreading rumors.
- There is a statistically significant correlation between the rate of exposure to fake news generated by artificial intelligence and its impact on national security.

Keywords:

Artificial intelligence, Deep fake, Algorithms, Fake news, National security.

دور تقنيات الذكاء الاصطناعي في نشر الشائعات والأخبار الزائفة وتأثيرها على الأمن القومي

ملخص الدراسة:

يهدف البحث إلى رصد دور تقنيات الذكاء الاصطناعي في نشر الشائعات والأخبار الكاذبة والكشف عن تأثيرها على الأمن القومي ،استخدم البحث منهج المسح الإعلامي على عينة عشوائية من الصور المزيفة للرؤساء وبعض الشخصيات الشهيرة المنشورة على منصات التواصل الاجتماعي.

استخدم البحث أداة الاستبيان تم تطبيقها على مجموعة من الصحفيين وأساتذة الإعلام وخبراء الذكاء الاصطناعي لرصد آرائهم حول موضوع الدراسة والحصول على نتائج حول تأثير تقنيات الذكاء الاصطناعي على الأمن القومي، وكذلك معرفة كيفية التصدي لظاهرة الأخبار المفبركة بواسطة الذكاء الاصطناعي .

وظف البحث نظرية المجال العام Public Sphere التي أكدت على أن التطورات التكنولوجية وظهور منصات التواصل الاجتماعي سهلت نشر الأخبار الكاذبة وفتحت المجال لذلك، مما يؤدي إلى الإضرار بالأمن القومي ، كما كشفت نتائج المسح والاستبيان أن فيسبوك ويوتيوب هما أكثر المنصات شعبية لنشر المعلومات الكاذبة، يتم نشر هذه الأخبار المزيفة في كثير من الأحيان لدعم الأهداف الحكومية، وكسب التعاطف الشعبي، أو لخدمة مصالح أحزاب سياسية أو أفراد معينين، كانت بعض برامج الذكاء الاصطناعي، مثل Midjourney، وCopilot، وAI Studio، وPrompts، وDall-E، مسئولة عن فبركة الصور المزيفة.

نتائج نموذج الاستبيان:

- اتفق أفراد عينة الدراسة على أن تقنيات الذكاء الاصطناعي تساعد في نشر الأخبار الكاذبة لأن معظم تقنيات الذكاء الاصطناعي يسهل استخدامها في تصنيع صور مفبركة .
- اتفق أفراد عينة الدراسة على أن الأخبار السياسية _ وخاصة الرئاسية_ هي الأكثر تزييفاً.
- أجمع أفراد عينة الدراسة على ضرورة نشر الأخبار الصحيحة في وسائل الإعلام الحكومية، والتوعية بمخاطر استخدام تقنيات الذكاء الاصطناعي.
- أفاد أغلب أفراد العينة أن الشباب الجامعي هم الأكثر حاجة للتوعية بمخاطر تقنيات الذكاء الاصطناعي.

- ذكرت عينة الدراسة الإجراءات التي يجب على الدول اتخاذها لحماية أمنها القومي من الجرائم لإلكترونية والأخبار الكاذبة من خلال حملات التوعية المستمرة والندوات وورش العمل للتثقيف الإعلامي الرقمي، وتنفيذ قوانين صارمة ضد مرتكبي الجرائم الإلكترونية ومروجي الشائعات وكل من يقوم بتزييف الصور، والفيديو والصوت، وزيادة الوعي والشفافية وضرورة الرد الفوري والمباشر على الشائعات.
- ذكر معظم أفراد عينة الدراسة أن الأخبار المفبركة بواسطة الذكاء الاصطناعي يمكنها أن تضر بالأمن القومي.
- أثبتت الدراسة وجود علاقة ارتباطية طردية مرتفعة دالة إحصائية بين معدل توظيف مواقع التواصل الاجتماعي لتقنيات الذكاء الاصناعي في تزييف الأخبار و بين نشر الشائعات.
- أثبتت الدراسة وجود علاقة ارتباطيه ذات دلاله إحصائية بين معدل التعرض للأخبار المفبركة بواسطة الذكاء الاصطناعي و التأثير على الأمن القومي.

الكلمات الدالة:

الذكاء الاصطناعي، التزييف العميق، الأخبار الزائفة، اللوغريتمات، الأمن القومي.

Introduction:

Nowadays, artificial intelligence plays a vital role in spreading fake news by using some techniques specialized in falsifying news, such as the deep fake technique and other techniques. Recently, some news sites and some platforms in social media have used these techniques, especially "deep fake," to spread rumors to serve specific aims for the benefit of certain parties. On the other hand, governments and media try hard to combat rumors that usually affect national security.

Journalism has known the phenomenon of fake news since the 19th century, but the internet revolution and social media gave it new dimensions, where governments can easily do and spread it in a short time.

Artificial intelligence could recently create fake videos and images for many politicians and famous people, so these days you can listen to fake statements from politicians and officials, but they aren't real and didn't happen. Because of the "deep fake" technique, artificial intelligence applications can generate thousands of videos and images that are indistinguishable from the real ones.

So this research aims to detect the role of artificial intelligence techniques in spreading rumors by analyzing some random samples of fake photos that have been falsified by artificial intelligence to recognize the kind of news that have been falsified and the reason for falsifying; furthermore, the study aims to detect the impact of rumors and fake news on national security through a questionnaire form that was applied to a sample of artificial intelligence experts and academics to get results about the impact of fake news on national security and methods of reducing and combating the fake news.

Study's problem:

This research aims to detect the role of artificial intelligence techniques in spreading rumors and fake news by analyzing a random sample of images that have been falsified by artificial intelligence to recognize the aims of falsifying these images, the sites that spread these fake photos, and the techniques and sites that have been used to fabricate them.

From another side, the study aims to monitor the effect of fake news generated by artificial intelligence on national security through a questionnaire form that has been applied to a sample of artificial intelligence experts and academics to reach accurate results regarding the impact of the rate of exposure to news generated by artificial intelligence techniques on national security and the political, military, and social risks of that phenomenon.

The study also aims to identify the segments of society most affected by news generated by artificial intelligence technologies and ways to combat and reduce this phenomenon.

Importance of the study:

1. Statistics indicate that the famous YouTube site witnesses fake videos uploading every minute, while more than nine million fake photos and videos are published via Instagram, while WhatsApp and Facebook have much greater statistics, so the importance of this study is to monitor and analyze this phenomenon.
2. Most studies also focus on the role of artificial intelligence in facing and detecting fake news, but few studies are interested in studying the role of artificial intelligence in spreading fake news.
3. This study aims to detect programs and sites that employ artificial intelligence to create "deep fake" photos, as well as other sites that use highly professional methods to create photos. These approaches are employed with various official characters and presidents, which have an impact on national security in numerous countries.
4. The study can show the applications and techniques that are being used to falsify some of the official photos on social media.
5. The study aims to monitor fabricated media content by AI, the platforms on which it is published, the most prominent sites used to fake it, and the object of faking that content.
6. Through the use of a questionnaire form that has been applied to a sample of artificial intelligence experts, the study also tracks the effects of artificial intelligence-generated fake news on national security. It also reveals strategies for stopping the spread of fake news through AI.

The previous studies:

The first topic: the role of artificial intelligence technologies in spreading rumors and fake news.

Study (Sankaranarayanan K. B & Kadeswaran Sengottaiyan2023 [1]) refers to The embodiments herein generally relate to an artificial intelligence-based approach for fake news detection in social media. The method of growth of social media has made it easier for people to find information, and the social platform encourages users to actively participate in discussions about current events and popular culture. As a result, users have access to a wealth of social features like sharing, commenting, and praise, which have the potential to bring about significant

political and economic benefits as well as encourage the spread of false information. On social networks, fake news has a tendency to spread more quickly, further, and more broadly than actual news. It is not. It is common knowledge that conflicting interests can arise while spreading information or "propagating". On the one hand, it is frequently in the best interest of a person, business, 15 governmental entity, political party, etc. to quickly disseminate information to a broad audience, such as news, advertisements, bulletins, or warnings. This might support one's cause, career, or social standing. On the other hand, those who are actually disseminating the information may have a stake in making sure that it is only done accurately and in a way that does them no damage. The atmosphere for consumption has recently changed as a result of the rise of single-person media. The side effect of creating and disseminating careless false news, such as intriguing inventions or combinations, is growing since single-person media content may be consumed in real-time, independent of time and location. Fake news is becoming more harmful on an economic and social level. In other words, fishing articles, abusive articles, "articles written for a specific purpose such as publicity," and "advertising articles" make news consumers even more perplexed. The social costs are also dramatically rising, and it is predicted that false news harms the economy trillions of won. The increasing popularity of social media has created an unprecedented challenge to the information dissemination ecology, leading to a flood of extreme news, pranks, rumors, fake news, and other false or unproven opinions. The abuse of fake news seriously affects the lives, social stability, and national safety of people. How to quickly identify the authenticity of the information to be verified in the network environment, and the 10 verification results are transparent and interpretable for the user, has become one of the important problems to be solved at present., a study (Albara Awajan & outaz Alazab& Ruba Abu Khurma2022[2]) The circulation of fake news among people is not something new, as it has been present ages ago. In a connected world, due to the rapid development in the means of communication, fake news has become a very dangerous factor in daily life due to its massive impact. Furthermore, the size and speed of data shared through mediums make it difficult to differentiate between fake and legitimate information. Social media allows sharing of data with low cost and easy access. This causes a harmful impact on individuals and society. Fake news classification and related topics have become an attractive topic for researchers in many disciplines, such as journalism, natural language processing, and national security. This paper reviews the various methods and techniques used in solving the fake news problem and investigates weaknesses in the methods and techniques used in the literature review. The challenge is to find the most useful technology for detecting and mapping fake news. We concluded that many techniques and systems were designed and implemented to automate the process of detecting fake and misleading news and also identified that deep learning

techniques have a great ability to categorize and identify hidden correlations between multiple features in several fake news benchmark datasets in a way that overcomes human capabilities.

That study (Bontridder, N., & Poullet, Y 2021)[3] refers to artificial intelligence (AI) systems playing an overarching role in the disinformation phenomenon our world is currently facing. Such systems boost the problem not only by generating opportunities to create increasingly realistic AI-generated fake content but also, and essentially, by facilitating the dissemination of disinformation to a targeted audience and at scale by malicious stakeholders. This situation entails multiple ethical and human rights concerns, in particular regarding human dignity, autonomy, democracy, and peace. In reaction, other AI systems are developed to detect and regulate disinformation online. Such systems do not escape from ethical and human rights concerns either, especially regarding freedom of expression and information. And study (Zsolt Ziegler 2021) [4]argues that Michael Polányi's account of how science, as an institution, establishes knowledge can provide a structure for a future institution capable of countering misinformation, or fake news, and deep fakes; he argues that only an institutional approach can adequately take up the challenge against the corresponding institution of fake news. The fact of filtering news and information may be bothersome. It is the threat of censorship and free speech limitation. Instead, I propose that we should indicate reliable information with trademark and news signing-approved information and brand equity. I offer a method of creating a standard for online news that people can rely on (similar to high-quality shopping products). Deep fakes have rapidly emerged as one of the most ominous concerns within modern society., And study (Nadine Liv,Dov Greenbaum 2020)[5] refers to Deep fakes have rapidly emerged as one of the most ominous concerns within modern society. The ability to easily and cheaply generate convincing images, audio, and video via artificial intelligence will have repercussions within politics, privacy, law, security, and broadly across all of society. In light of the widespread apprehension, numerous technological efforts aim to develop tools to distinguish between reliable audio/video and the fakes. These tools and strategies will be particularly effective for consumers when their guard is naturally up, for example during election cycles. However, recent research suggests that not only can deep fakes create credible representations of reality, but they can also be employed to create false memories. Memory malleability research has been around for some time, but it relied on doctored photographs or text to generate fraudulent recollections. These recollected but fake memories take advantage of our cognitive miserliness that favors selecting those recalled memories that evoke our preferred weltanschauung. Even responsible consumers can be duped when false but belief-consistent memories, implanted when we are least vigilant, can, like a Trojan horse, be later elicited at crucial dates to confirm

our pre-determined biases and influence us to accomplish nefarious goals. This paper seeks to understand the process of how such memories are created and, based on that, propose ethical and legal guidelines for the legitimate use of fake technologies. And study (Verma, A., Mittal, V., & Dawn, S. (2019)[6] refers to Fake news detection is very difficult while its spread is simple and has vast repercussions. To tackle this problem, we propose a model that detects fake information and news with the help of deep learning and natural language processing. A deep neural network on a self-scraped data set is trained, and by using natural language processing, the correlation of words in respective documents is found, and these correlations serve as initial weights for the deep neural network, which predicts a binary label to detect whether the news is fake or not. In this work, we have successfully used recurrent neural networks, long short-term memories, and grated recurrent units to test for classification. A tensor board is used for implementation of the proposed framework and to provide visualizations for the neural network. Confusion matrix and classification reports show that an accuracy score of up to 94 percent can be achieved using the LSTM model. The tradeoff is the increased time requirement. Since the fake news can be established based on the learning model, a good training set is mandatory. The results show that the proposed framework is able to adequately present accurate results.

This study (Colliander, J 2019)[7] examines the effects of conformity to others online when individuals respond to fake news. It finds that after exposure to others' comments critical of a fake news article, individuals' attitudes, propensity to make positive comments, and intentions to share the fake news were lower than after exposure to others' comments supportive of a fake news article. Furthermore, this research finds that the use of a disclaimer from a social media company alerting individuals to the fact that the news might be fake does not lower individuals' attitudes, propensity to make positive comments, and intentions to share the fake news as much as critical comments from other users., Study (Jones, M. O. (2019)[8] reveals how bots were used to manipulate Twitter trends, promote fake news, increase the ranking of anti-Qatar tweets from specific political figures, present the illusion of grassroots Qatari opposition to the Tamim regime, and pollute the information sphere around Qatar, thus amplifying propaganda discourses beyond regional and national news channels. To address the dual need to examine the weaponization of social media and the nature of non-Western propaganda, this article explores the use of Twitter bots in the Gulf crisis that began in 2017. Twitter account creation dates within hashtag samples are used as a primary indicator for detecting Twitter bots. Following identification, the various modalities of their deployment in the crisis are analyzed. It is argued that bots were used during the crisis primarily to increase negative information and propaganda from the blockading countries toward Qatar. In terms of modalities and study (Alsridi, H.,

Elareshi, M., & Ziani, A. K. (2018) [9]refers to the online activities that allow users to benefit from and engage with news and information in a more complex way than was possible with old news settings. However, many have expressed concerns about the effects of false news stories, or 'fake news', circulated largely via online services on public view. This study examines the news sites' behavior and the attitudes of elite Egyptian academics towards information provided by the aljazeera.net news site during the Egyptian political conflict and the transformation from former President Mohamed Morsi to current President Abdul Fatah el-Sisi. A total of 450 elite academics were surveyed online to evaluate news and information about the political conflict and the transformation in Egypt, focusing on how they became informed about such news, their perceptions of news via the aljazeera.net site, and their evaluation of whether the network has misused information regarding this period. The results indicated that the aljazeera.net site used different, false, and 'fake news' techniques, mainly in support of the pro-Morsi position during the transition to el-Sisi. Respondents indicated that misinformation was clearly provided by aljazeera.net in different formats, though some highlighted the importance of accessing news from online sources. Respondents indicated that online content can be easily spread among users with no significant third-party filtering, fact-checking, or editorial judgment. This raises questions about who becomes the arbiter of truth., The study (Kyeong Hwan Kim, Chang Sung Jeong 2019)[10] refers to fake news has been incurring many problems recently to our society. As a result, many researchers have been working on identifying fake news. Most of the fake news detection systems utilize the linguistic feature of the news. However, they have difficulty sensing highly ambiguous fake news, which can be detected only after identifying meaning and the latest related information. In this paper, to resolve this problem, we shall present a new Korean fake news detection system using fact DB, which is built and updated by humans's direct judgment after collecting obvious facts. Our system receives a proposition and searches the semantically related articles from Fact DB in order to verify whether the given proposition is true or not by comparing the proposition with the related articles in Fact DB. To achieve this, we utilize a deep learning model, Bidirectional Multi-Perspective Matching for Natural Language Sentence (BiMPM), which has demonstrated a good performance for the sentence matching task. However, BiMPM has some limitations in that the longer the length of the input sentence is, the lower its performance is, and it has difficulty making an accurate judgment when an unlearned word or relation between words appears. In order to overcome the limitations, we shall propose a new matching technique that exploits article abstraction as well as entity matching sets in addition to BiMPM. In our experiment, we shall show that our system improves the whole performance for fake news detection.

The study (Ye Chan Ahn, Chang Sung Jeong 2019)[11] refers to a lot of information spreading rapidly on SNS. Inaccurate communication of news media includes fears about unreliable sources and fake news that lacks confirmation of facts. Fake news is spread through SNS, causing social confusion and further economic loss. The purpose of the news is accurate information transmission. In this regard, it is very important to judge the discrepancies in the contents of the text and the distorted reports. We try to solve the problem of judging whether the sentence to be verified is correct after collecting the facts. This paper defines the problem of extracting the related sentences from the input sentence in Fact Data Corpus, which is assumed to be fact, and judging whether the extracted sentence and the input sentence are true or false. In the various NLP tasks, we create a Korean-specific pre-training model using state-of-the-art BERT. Using this model, fine-tuning is performed to match the data set detected by Korean fake news. The AUROC score of 83.8% is derived from the test set generated using the fine-tuned model. , a study (ZHOU XINYI et al,2019)[12] refers to The explosive growth of fake news and its erosion of democracy, justice, and public trust increased the demand for fake news detection. As an interdisciplinary topic, the study of fake news encourages a concerted effort of experts in computer and information science, political science, journalism, social science, psychology, and economics. A comprehensive framework to systematically understand and detect fake news is necessary to attract and unite researchers in related areas to conduct research on fake news. This tutorial aims to clearly present (1) fake news research, its challenges, and research directions; (2) a comparison between fake news and other related concepts (e.g., rumors); (3) the fundamental theories developed across various disciplines that facilitate interdisciplinary research; (4) various detection strategies unified under a comprehensive framework for fake news detection; and (5) the state-of-the-art datasets, patterns, and models. We present fake news detection from various perspectives, which involve news content and information in social networks, and broadly adopt techniques in data mining, machine learning, natural language processing, information retrieval, and social search. Facing the upcoming 2020 U.S. presidential election, challenges for automatic, effective, and efficient fake news detection are also clarified in this tutorial., and study (7. Kim, A., & Dennis, A. R. (2019)[13] refers to news—real or fake—is now abundant on social media. News posts on social media focus users' attention on the headlines, but does it matter who wrote the article? We investigate whether changing the presentation format to highlight the source of the article affects its believability and how social media users choose to engage with it. We conducted two experiments and found that nudging users to think about who wrote the article influenced the extent to which they believed it. The presentation format of highlighting the source had a main effect; it made users more skeptical of all articles, regardless of the source's credibility. For unknown sources, low source ratings had a direct effect on

beliefability. Believability, in turn, influenced the extent to which users would engage with the article (e.g., read, like, comment, and share). We also found confirmation bias to be rampant—users were more likely to believe articles that aligned with their beliefs, over and above the effects of other factors.

That study (GELFERT, A. 2018)[14] refers to Despite being a new term, 'fake news' has evolved rapidly. This paper argues that it should be reserved for cases of deliberate presentation of false or misleading claims as news, where these are misleading by design. The phrase 'by design' here refers to systemic features of the design of the sources and channels by which fake news propagates and, thereby, manipulates the audience's cognitive processes. This prospective definition is then tested: first, by contrasting fake news with other forms of public disinformation; second, by considering whether it helps pinpoint conditions for the proliferation of fake news and study (Aaron Quinn 2016)[15] refers to Many of U.S. President Donald Trump's business interests—and those of his family and close associates—either conflict or could conflict with his position as the country's top elected official. Despite concerns about the vitality of the journalism industry, these actual or potential conflicts have been reported in great detail across a number of journalism platforms. More concerning, however, are the partisan news organizations on both the right and left that deliberately sow social discord by exciting deeply polarized political tensions among the U.S. populous. Often described as "fake" news, these organizations produce reports that seem designed to create outrage among audiences instead of enlightenment. This paper draws upon social epistemology and information ethics to offer a truth-based ethos for journalism to help overcome this pernicious form of exploitation.

This study (Youngkyung Seo, Deokjin Seo 2018)[16] refers to the development of media, including newspapers written by robots and many unreliable sources; it's getting hard to distinguish whether the news is true or not. In this paper, we shall present a novel fake news detection model, FaNDeR (Fake News Detection Model Using Media Reliability), which can efficiently classify the level of truth for the news in the question answering system based on a modified CNN deep learning model. Our model reflects the reliability of various media by training with the input dataset, which contains the truthfulness of each media as well as that of the proposition. Our model is designed for higher accuracy with the media dataset in terms of data augmentation, batch size control, and model modification. We shall show that our model has higher accuracy than a statistical approach by reflecting the tendency of truth level for each medium through the training of the dataset collected so far and study (Allcott, H., & Gentzkow, M. 2017)[17] refers to Following the 2016 US presidential election, many have expressed concern about the effects of false stories ("fake news"), circulated largely through social media. We discuss the economics of fake news and present new data on its consumption

prior to the election. Drawing on web browsing data, archives of fact-checking websites, and results from a new online survey, we find: 1) social media was an important but not dominant source of election news, with 14 percent of Americans calling social media their "most important" source; 2) of the known false news stories that appeared in the three months before the election, those favoring Trump were shared a total of 30 million times on Facebook, while those favoring Clinton were shared 8 million times; 3) the average American adult saw on the order of one or perhaps several fake news stories in the months around the election, with just over half of those who recalled seeing them believing them; and 4) people are much more likely to believe stories that favor their preferred candidate, specially if they have ideologically segregated social media networks. This study (Balmas, M. (2016)[18], aims to assess possible associations between viewing fake news (i.e., political satire) and attitudes of inefficacy, alienation, and cynicism toward political candidates. Using survey data collected during the 2006 Israeli election campaign, the study provides evidence for an indirect positive effect of fake news viewing in fostering the feelings of inefficacy, alienation, and cynicism through the mediator variable of perceived realism of fake news. Within this process, hard news viewing serves as a moderator of the association between viewing fake news and their perceived realism. It was also demonstrated that perceived realism of fake news is stronger among individuals with high exposure to fake news and low exposure to hard news than among those with high exposure to both fake and hard news. Overall, this study contributes to the scientific knowledge regarding the influence of the interaction between various types of media use on political effects.

Comment on the first topic :

1. The studies agreed that artificial intelligence facilitates the dissemination of misinformation to targeted audience and at scale by malicious stakeholders.
2. The studies agreed on The ability to generate convincing images, audio, and video via artificial intelligence will have repercussions within politics, privacy, law, security, and broadly across all of society.
3. Most studies indicated that numerous technological efforts aim to develop tools to distinguish between reliable audio and video and fakes. These tools and strategies will be particularly effective for consumers when their guard is naturally up.
4. The studies also agreed that numerous technological efforts aim to develop tools to distinguish between reliable audio, video, and fakes. These tools and strategies will be particularly effective for consumers when their guard is naturally up.

5. One study presented a model called FaNDeR (Fake News Detection Model Using Media Reliability), which can efficiently classify the level of truth of the news in the question-answering system based on a modified CNN deep learning model.
6. Another study provides evidence for an indirect positive effect of fake news viewing on fostering feelings of inefficacy, alienation, and cynicism through the mediator variable of perceived realism of fake news. Within this process, hard news viewing serves as a moderator of the association between viewing fake news and their perceived realism.
7. The studies agreed on the importance of proposing ethical and legal guidelines for the legitimate use of technologies that are being used to falsify photos and videos.
8. Some studies refer to the fact that not only can deep fakes create credible representations of reality, but they can also be employed to create false memories.
9. One of the studies refers to how to employ artificial intelligence in political crises, such as using bots to manipulate Twitter trends, promote fake news, and increase the ranking of anti-Qatar tweets from specific political figures during the Gulf crisis that began in 2017.
10. One of the studies used social epistemology and information ethics to overcome the fake news problem.

The second topic :an effect of fake news and rumors on national security :

This study (Ilija Životić& Darko Obradović 2024[19]) aims to defend the hypothesis of the negative impact of disinformation and conspiracy theories on the national security of the Republic of Serbia by using examples from the last few years that have been exploited in public discourse and abused by the Russian Federation with the aim of reducing the support of Serbian citizens to membership in the European Union by placing erroneous and malicious claims related to members of the LGBT community through the prism of the alleged danger of violating the traditional form of the misuse of conspiracy theories about COVID-19 vaccines as a genetic weapon, as well as spreading misinformation that undermines the exploitation of lithium in the Republic of Serbia, which jeopardizes the economic progress of the state and therefore its national security.

A study (Samah Muhammad Lotfy2023 [20])aimed to reveal the dangers of crimes of spreading electronic rumors on social media and their impact on Egyptian national security at the level (political, intellectual, social, economic, military) from the point of view of university youth? And determining methods for combating this type of crime by applying them to a sample of university youth who use social networking sites at Al-Arish University. To achieve the objectives of the study, the study began from several theoretical approaches, namely the theory of the global

risk society by Ulrich Beck, Giddens' theory of globalization and risks, and the functional theory of Robert Merton. The current study used the sample social survey approach with the aim of describing and analyzing the phenomenon under study, and the electronic questionnaire was applied to a sample. Available from social media users from university youth at Al-Arish University. The questionnaire was applied to 163 individuals. The results of the study revealed the presence of many risks for the crimes of spreading rumors on Egyptian national security at the (political, social, economic, military, and intellectual) levels.

A study(Uwaebuka Wisdom Madu&Stephen adekunle Ajay2019[21]) refers to Misinformation and disinformation, popularly known as 'fake news' have assumed a disturbing dimension in recent times. Its damaging implications cut across every fiber of a people's communal life; from politics to religion, from business to social life. Perhaps, the most pronounced area of concern over fake news, particularly in Nigeria is national security, which unarguably is, the greatest challenge of the country at the moment. National security is a sine qua non for economic development and the total wellbeing of a nation. This paper therefore adopted a conceptual framework to basically examine the implications of the menace of fake news for national security. Effort was made to x-ray the conceptual overview and historical evolution of fake news, the strategies for curbing fake news as a way of promoting national security and consequently national economic development. Tips on how to identify fake news were equally suggested.Consequently, the paper recommends that, efforts must be made by all relevant stakeholders to ensure that Nigerians are sensitize to understand the dangers posed by fake news as it threatens not only the peace and security, but the very corporate existence of the country.

And a study (Gergana Georgieva&Gabriela Belova 2018[22]) refers to Misinformation and disinformation, popularly known as 'fake news', have assumed a disturbing dimension in recent times. Its damaging implications cut across every fiber of a people's communal life, from politics to religion, from business to social life. Perhaps the most pronounced area of concern over fake news, particularly in Nigeria, is national security, which unarguably is the greatest challenge of the country at the moment. National security is a sine qua non for economic development and the total wellbeing of a nation. This paper therefore adopted a conceptual framework to basically examine the implications of the menace of fake news for national security. Effort was made to x-ray the conceptual overview and historical evolution of fake news and the strategies for curbing fake news as a way of promoting national security and consequently national economic development. Tips on how to identify fake news were equally suggested.Consequently, the paper recommends that efforts must be made by all relevant stakeholders to ensure that Nigerians are sensitized to understand the dangers posed by fake news, as it

threatens not only the peace and security but the very corporate existence of the country.

Comment on the second topic :

1. Some studies defend the hypothesis of the negative impact of disinformation and conspiracy theories on national security.
2. The results of many studies revealed the presence of many risks for the crimes of spreading rumors on Egyptian national security at the (political, social, economic, military, and intellectual) levels.
3. One of the studies used the theory of the global risk society by Ulrich Beck, Giddens' theory of globalization and risks, and the functional theory of Robert Merton.
4. One of the studies used the sample social survey approach with the aim of describing and analyzing the phenomenon under study, and the electronic questionnaire was applied to a sample.
5. Some studies refer to efforts that must be made by all relevant stakeholders to ensure that society is sensitized to understand the dangers posed by fake news, as it threatens not only the peace and security but the very corporate existence of the country.
6. One of these studies refers to fake news as suppressing the media and society as a whole, calling for an EU-level analysis in order to assess the extent to which fake news menaces the EU and pinpoint whether it is likely to find a common solution regarding this issue.

Objectives of the study:

The main objective is to discover and monitor the role of artificial intelligence techniques in spreading rumors and fake news and their effect on national security.

1. monitoring some cases of fake news, especially fake photos.
2. Identifying the role of artificial intelligence techniques in spreading rumors and fake news.
3. Showing the impact of artificial intelligence techniques on national security.
4. Detect the artificial intelligence techniques used in falsifying media content.
5. Identifying the type of news that was being falsified.
6. Monitoring the most media platforms that use artificial intelligence techniques to falsify the news.
7. Identification of mechanisms to combat fake news through artificial intelligence.

Study assumptions:

1.There is a statistically significant correlation between the rate of exposure to fake news through artificial intelligence techniques and the spread of rumors.

2.There is a statistically significant correlation between the rate of exposure to fake news through artificial intelligence techniques and the impact on national security.

3.There is a statistically significant correlation between the rate of using social media for artificial intelligence techniques in news manipulation and the spread of rumors.

4.There is a statistically significant correlation between the type of news that is most distorted and its impact on national security.

Questions of the study:

The main question in this study is: What's the role of artificial intelligence techniques in spreading rumors and fake news, and how does it affect on national security?

1. What's the role of artificial intelligence in spreading rumors and fake news?
2. What's the effect of artificial intelligence on national security?
3. How is artificial intelligence being used in falsified videos and photos?
4. What are the applications that are being used to falsify photos and videos?
5. What is the type of news that was being falsified?
6. How do artificial intelligence techniques affect national security?
7. How can we combat the fake news falsified by artificial intelligence?
8. What are the groups most in need of awareness of the dangers of artificial intelligence ?

Theoretical frame work:

First: public sphere theory

The public sphere in its new form is based on an attempt to understand the limits of the role of the new media in enabling public debate and facilitating the formation of consensuses that express active public opinion, so that they serve as a framework.

The role of social networks in spreading rumors It can clarify the limits of the role played by the new media represented in blogs, forums, and discussion groups in managing and directing political and social discussion in the community in order to enhance public participation[23].

Scholars have also adapted public sphere(s) theory to sociopolitical, socio-economic and socio-cultural developments over the past decades. On the one hand,

these developments included broad societal trends such as individualization, transnationalization or the rise of nationalist and populist movements in many countries On the other hand, the public sphere(s) were profoundly affected by changes in contemporary communication and media ecosystems over the past two to three decades. These included the rise of online and social media, the (related) crisis of legacy media or the rise of alternative media "alternative social media" or "dark platforms" all fundamentally connected to the digital transformation of contemporary communication and media ecosystems[24].

In this research, the public sphere can be examined by focusing on mass media, particularly digital media, which provides an extensive platform for the dissemination of misinformation and subsequent public responses.

Also This theory can be used in this study because the technologies of artificial intelligence facilitated opening the public sphere to public opinion to deliberate and spread rumors and fake news and created a suitable environment for that, so social media is an electronic environment that is used for these purposes.

Second: Social Responsibility Theory

Social responsibility theory allows free press without any censorship but at the same time the content of the press should be discussed in public panel and media should accept any obligation from public interference or professional self regulations or both.

The theory helped in creating professionalism in media by setting up a high level of accuracy, truth, and information. The commission of press council also included some tasks based on social responsibility of media, which are as follows:

1. Formulate the code of conduct for the press.
2. Improve the standards of journalism.
3. Safeguarding the interests of journalism and journalist.
4. Criticize and make some penalty for violating the code of conduct.

The theory allows:

1. Everyone to say something or express their opinion about the media.
2. Community opinion, Consumer action and professional ethics.
3. Serious invasion of recognized private rights and vital social interests.
4. Private ownership in media may give better public service unless government has to take over to assure the public to provide better media service.
5. Media must take care of social responsibility and if they do not, government or other organization will do[25].

This theory has been employed in this research through the media's responsibility and its social role to protect society and national security from the dangers of fake news and fabricated photos that have been falsified by artificial intelligence to serve the objectives of specific parties. Also, the media should be responsible for spreading the correct news and explaining its details for society, and also the governmental media should have units that are responsible for reverse searching of fabricated materials, especially in social media, and spreading the facts and correct information.

Type and method of the study:

This research pertains to descriptive studies focused on elucidating a phenomenon and its reasons and dimensions concerning the role of artificial intelligence techniques such as "deep fake" in the dissemination of rumors and fake news. Additionally, it falls within the realm of field studies aiming to explore the impact of rumors and fake news on national security.

Method of the study:

This research employed a media survey methodology, which was implemented on a random selection of images utilizing artificial intelligence methods to create fake news.

Analysis tool:

The questionnaire form:

The questionnaire form was administered to a purposeful sample of artificial intelligence experts and academics to elicit findings regarding the role of artificial intelligence in the dissemination of rumors and fake news, as well as their repercussions on national security. The research form was applied to a sample of 60 people, and this is a somewhat small sample due to the small number of specialists in artificial intelligence, and also the questionnaire form has in-depth theoretical questions that need to be answered by specialists in artificial intelligence.

The study tool was applied to a random sample of the media elite (journalistic professionals - academics), and Table (1) illustrates the description of the study sample according to (gender - age - educational qualification - occupation).

Table (1)
Description of the Study Sample

	Variables	Number	Percentage
M	**Type**	**K**	**%**
1	Male	19	31.67
2	Female	31	68.33
Total		60	100
M	**Age**	**k**	**%**
1	Less than 30	11	18.3
2	from 30 to less than 40	21	35.0
3	from 40 to less than 50	18	30.0
4	from 50 or more	10	16.7
Total		60	100
M	**Educational Qualification**	**K**	**%**
1	University student	15	25.0
2	Master's	5	8.3
3	PhD	40	66.7
Total		60	100
M	**Job**	**K**	**%**
1	Journalist	20	33.3
2	Faculty professors	40	66.7
Total		60	100

The validity of the study tool:

The validity of the external questionnaire was confirmed by presenting it to $(4)^{26}$ experts and specialists in the field of media for evaluation. After reviewing the study's title, questions, and objectives, the reviewers provided their opinions and observations regarding the questionnaire items, assessing their relevance to the study's topic, their validity in revealing the desired information, as well as the coherence of each item with its respective axis, clarity of the items, correctness of their formulation, and suggesting ways to improve them by indicating whether to delete, retain, or modify phrases, and considering the scale's progression and its appropriateness, among other relevant points. Based on the judges' opinions and observations, some paragraphs and questions were modified, and certain sections were added or removed, making it suitable for application in its final form.

Reliability of the study tool

Due to the difficulty of reapplying the test on the sample individuals, reliability was calculated using Cronbach's alpha, with values ranging from 0.759 to 0.862. These reliability values indicate good consistency of the tool, thus ensuring confidence in the results of the field study and the validity of building upon them.

The results of the self-validity of the questions and axes of the study tool indicated high validity, ranging between (0.822) and (0.874), which are high values; this confirms the self-validity of the study tool.

The study sample:

This research has been conducted on random samples of images generated through artificial intelligence methodologies and disseminated across various social networking platforms.

Procedural terminology:

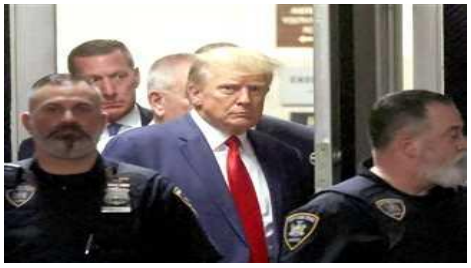
1. Artificial intelligence : Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Examples of AI applications include expert systems, natural language processing (NLP), speech recognition and machine vision ,As the hype around AI has accelerated, vendors have scrambled to promote how their products and services incorporate it. Often, what they refer to as "AI" is a well-established technology such as machine learning[27].
2. Deep fake: is artificial media produced using deep learning techniques and a portmanteau of “deep learning” and “fake.” Deep fakes replace features on one image with those of another[28].
3. Algorithms: a set of instructions to be followed in calculations or other operations.” This applies to both mathematics and computer science. So, at the essential level, an AI algorithm is the programming that tells the computer how to learn to operate on its own.[29].
4. Fake news: At its core, we are defining “fake news” as those news stories that are false: the story itself is fabricated, with no verifiable facts, sources or quotes. Sometimes these stories may be propaganda that is intentionally designed to mislead the reader, or may be designed as “clickbait” written for economic incentives (the writer profits on the number of people who click on the story)[30].
5. National security : National security is the security and defense of a nation state, including its citizens, economy, and institutions, which is regarded as a duty of government[31].

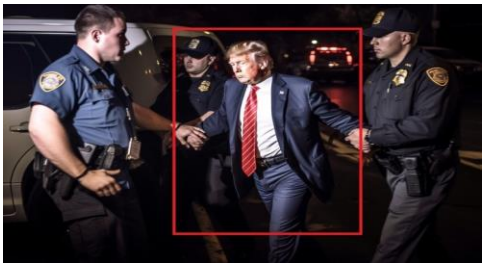
The survey study's findings:

Case (1)

During the presidential elections on March 21, 2023, some photos of American president Donald Trump spread on social media sites, especially Instagram and Twitter, and some news papers reported it. These photos showed the policemen's arrest of Donald Trump, especially since he was accused of bribery. So these photos spread widely on social media sites. The post generated over 70,000 likes in a day, while the Twitter thread generated over 40,000. Similar posts have spread widely on Instagram.

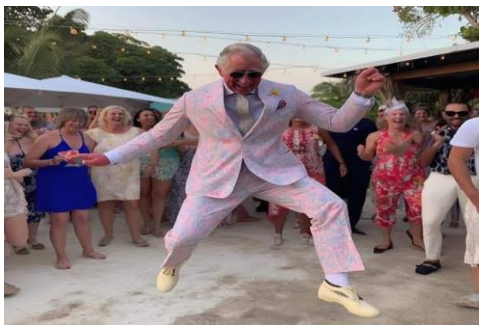
It was discovered that these photos were falsified by artificial intelligence techniques using "deep fake techniques".





Case (2)

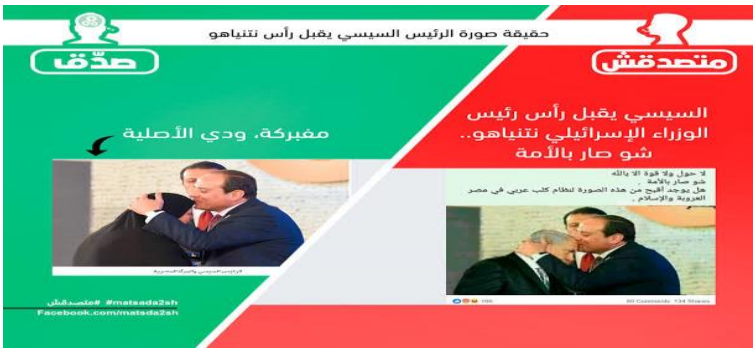
Also, some photos have spread on social media sites, especially on Facebook, that showed the king of England, Charles III, dancing with German chancellor Angla Mircal in sarcastic clothes during the celebration of his enthronement as king of England on the beach. These photos were also falsified by artificial intelligence techniques using "deep fake techniques".



Case (3)

Some photos were falsified by a deep fake technique for Egyptian President Abdelfattah Elsisi that showed the president kissing the head of Israeli Prime

Minister Benjamin Netanyahu. These photos spread on social media sites, causing a state of controversy among Egyptians, especially during the conflict situation in Gaza.
through reverse image search, which led to this publication with images of women receiving awards from the Egyptian President, including one in which El-Sisi kisses a woman's forehead.
The description indicates that the occasion was Women's Day in Egypt. A keyword search in Arabic led to a live-stream video posted by the Egyptian Extra News channel.
A review of the video shows at the 42:15 mark Fatima Abdel Hafeez Abdel being called and walking towards the President. The two shake hands before El-Sisi kisses her forehead.
The president's outfit, his aide, and the background screen confirm that the video and the image are from the same event.
The event was part of the International Women's Day celebrations, during which women who played pivotal roles in the country's development were recognized and appreciated.



Case (4)

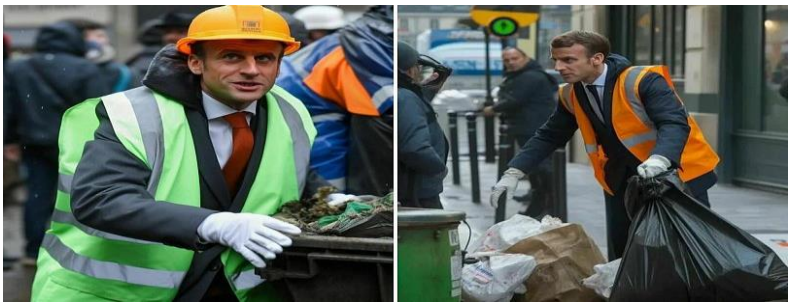
Recently, some photos have spread on social media sites that were falsified with deep fake technique and showed the Russian President Vladimir Putin kissing the hand of the Chinese President Ching during his last visit to China to express Russia's need for China to stand up for it during the Ukraine-Russia war. A correspondent for the English-language Kyiv Post also shared the picture that has also been circulating on the instant messaging service Telegram and the online image sharing service Imgur.

On closer inspection, several puzzling details in the image catch the eye. The rear shoe of the person kneeling—claimed to be Putin—is disproportionately large and wide. The calf on the same leg looks stretched. The person's head, while half covered, is also very large and does not match the proportions of the rest of the body. The ear is strangely deformed and features several odd, nondescript lumps

that other images of Putin's ear do not show. The ear on—purportedly—XXi Jinping's head also appears strangely deformed if one zooms in. But the most obvious discrepancy does not regard either Xi or Putin, but the person standing left of them. This man's hands appear to be fused together.

Case (5)

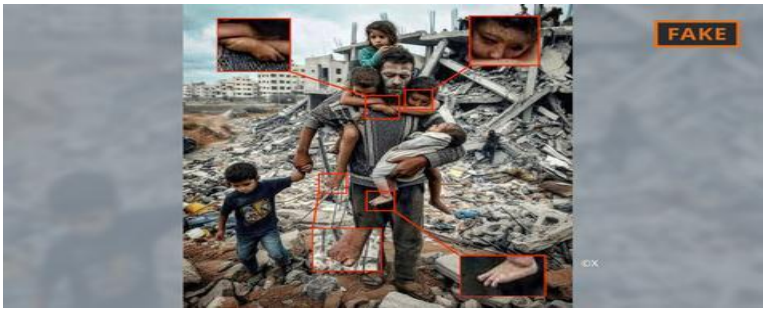
Also, some photos were spread for French President Emanual Makron that showed him swiping the street and wearing the clothes of cleaning men, and they were also falsified with “deep fake technique” to gain the sympathy of French people during the demonstrations against him.



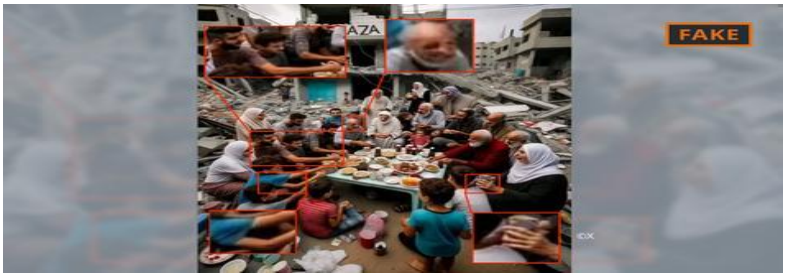
Case (6)

During the war between Israel and Hamas, some photos were falsified by a deep fake technique to attract public sympathy, like:

1. A photo spread in social media that showed “an Palestine man and his five children stand amid the rubble of war, but it was discovered the photo is fabricated by artificial intelligence techniques. Due to many errors and contradictions that are always found in photos, it can be noted the father’s right shoulder is disproportionately high with his left shoulder, in addition to the strange position of the two children’s hands around their father’s neck, and there are more or less fingers on either the hands or feet.



2. Another photo spread during the Israeli attack on the Gaza strip that showed “families eat together amid the rubble of war," which drew sympathy From civiliansintheGazastrip.



3. The same applies to a photo showing soldiers waving Israeli flags while walking in an area of Gaza amid the rubbles of destroyed homes ,it turned out that the accounts that published the photo on the X and insatgram sites were pro Israel , the photo was found also in Bulgarian newspaper article without declaring that it was a fake photo, the fabrication of this photo can be determined by observing the way the Israeli flags fly , the street that appears in the middle of the picture also appears clean ,un like its sides, and the rubble is in a very homogeneous shape , the visual impression of the image shows that it is so unrealistic that the image appears to be drawn ,which is an indication of the use of artificial intelligence .

Case (7)

In January 2024, the England royal palace announced that the princess of Wiles, Kate Midlton, had abdominal surgery, but many weeks before this announcement, the princess disappeared, and no one knows anything about her. On January 17, 2024, the royal palace announced the princess's health developments. However, he noted that her recovery period means that we will likely not see Kate again until after Easter, which this year falls on March 31.

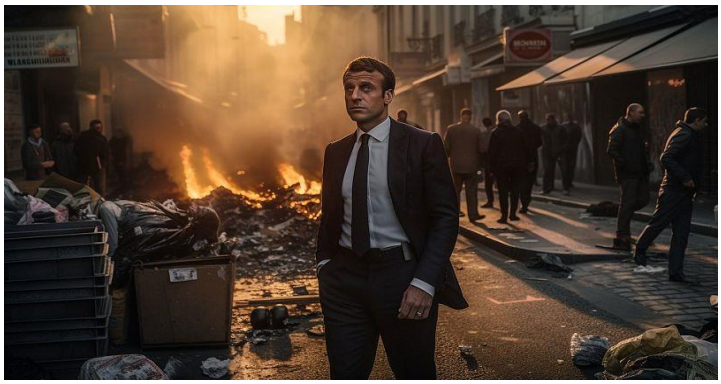
Kensington Palace in London tried to calm the situation and questions about the princess, so they published a picture of the princess with her three children as a new picture of the princess, but it failed to calm the controversy, as the controversial family picture fueled the rumor machine. After examination, many suggested that the picture was designed by artificial intelligence.

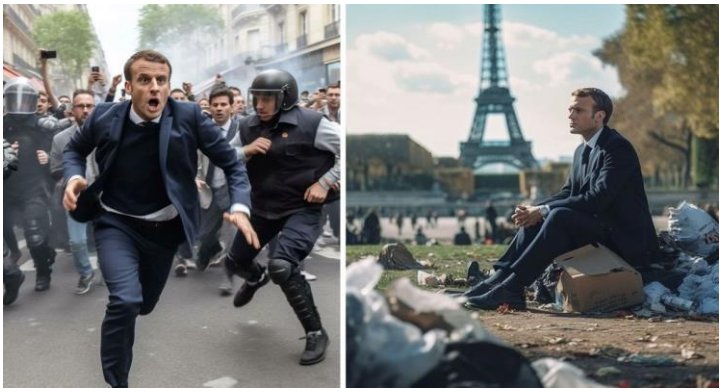
Case (8)

Amidst the ongoing troubles in France over the retirement reforms and the social unrest that has decried President Macron’s controversial bill, Internet users have turned to AI to get creative.

Some impressively realistic images generated by artificial intelligence tools have been circulating on social networks for the past few days.

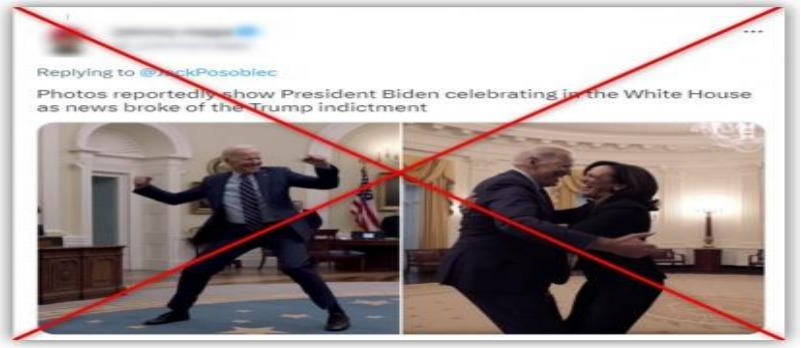
They come courtesy of the latest version of Midjourney, an artificial intelligence program created by a San Francisco-based independent research lab, Midjourney Inc., which first went live in March 2022. The program generates images from descriptions called "prompts," in the same way Stable Diffusion and DALL-E create images.





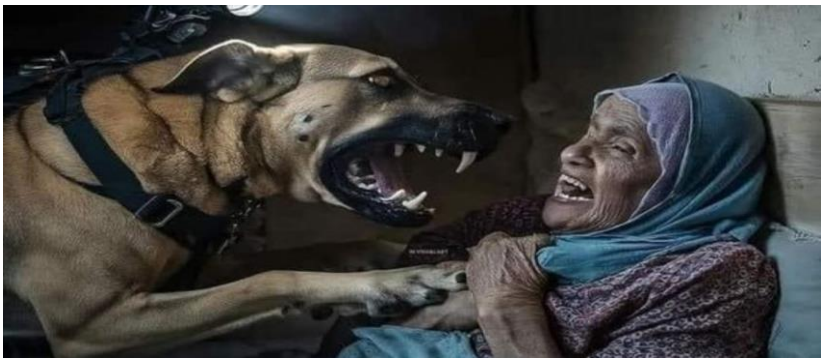
Case (9)

A pair of images are circulating online with claims that they show US President Joe Biden and Vice President Kamala Harris celebrating Donald Trump's indictment. This is false; the White House confirmed to AFP that the images, which appear to be created with artificial intelligence and show Harris with six fingers, are inauthentic.



Case (10)

June 27 Internet users shared an AI-generated image showing a dog with a mounted camera attacking an elderly woman, accompanied by a misleading description claiming the image was real and showing a dog attacking an elderly woman in Jabalia, Gaza Strip. Al Jazeera published a video clip showing a dog attacking an elderly woman on its YouTube channel on June 25, 2024, with the title: “Al Jazeera obtains leaked clips of a camera mounted on a police dog showing it attacking an elderly Palestinian woman.” However, the image is produced using artificial intelligence. The original image can be found posted on a designer's Instagram account under the name "In.Visual Art."



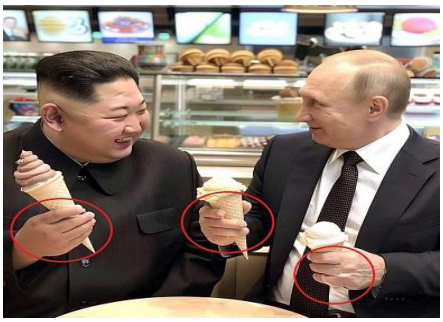
Case (11)

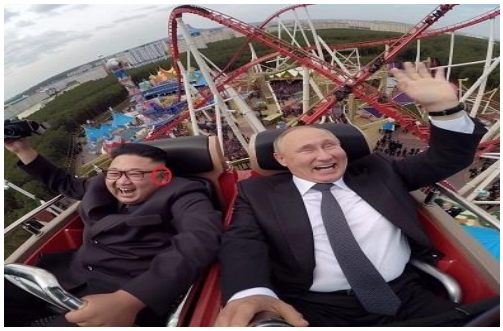
Pictures have spread on social media showing Russian President Vladimir Putin and North Korean leader Kim Jong Un in “funny” situations, including a picture of them eating ice cream, and another inside an amusement park.

The photos circulated came days after Putin's visit to North Korea, where the two countries signed a "comprehensive strategic cooperation" agreement that stipulates "the provision of assistance in the event that one of its parties is exposed to aggression," as the Russian president announced.

A reverse image search on the Google search engine leads to the fact that these images appear to have appeared for the first time on Thursday morning, and were published by a page called “Piques”, which is followed by more than 8 million users.

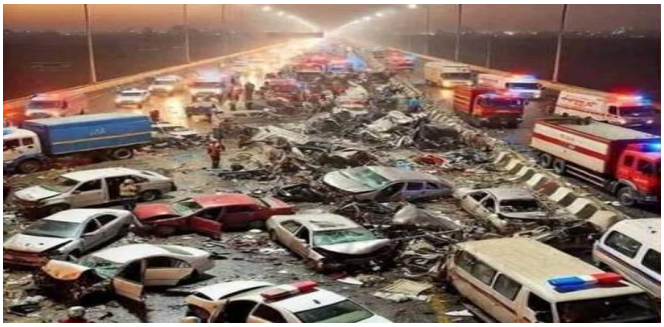
The administrator of the page, which used to publish works made with artificial intelligence, commented on the post, saying in English, “One of the good uses of AI.”





Case (12)

The security services monitored the circulation of a false image of the Giza Ring Road accident amid widespread interaction from social media users, amid comments containing some false information, and examination revealed that the image was not authentic.



questionnaire form findings:

1. What is your source for obtaining official news?

Table number (2)

Opinions of the sample individuals from the media elite regarding their source for obtaining official news (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies(204)
1	Traditional media (newspapers television - radio)	36	60	17.65
2	Social Media	54	90	26.47
3	Electronic Newspaper Websites	48	80	23.53
4	news sites	42	70	20.59
5	Other mentions	24	40	11.76
	Total	204		100

The previous table shows that the percentage of media elites obtaining official news through social media is 26.47% of the total repetitions, which amounts to 204 repetitions. This is followed by electronic newspaper sites at 23.53%, general news websites at 20.59%, traditional media at 17.65%, and other sources at 11.76%.

2. What are the most credible news sources in your opinion?

Table number (3)
Opinions of the sample members from the media elite regarding the most credible news sources (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies(210)
1	Television	54	90	25.71
2	Newspapers	48	80	22.86
3	Radio	42	70	20.00
4	Social media	30	50	14.29
5	Electronic sites	36	60	17.14
	Total	210		100

It is clear from the previous table that the most credible news sources according to the opinions of the media elites in the study sample, in order, are television at 25.71% of the total occurrences, which amount to 210 occurrences, followed by newspapers at 22.86%, then radio at 20%, then electronic websites at 17.14%, and finally social media at 14.29%.

3. What are the social media platforms most prone to spreading rumors?

Table number(4)
Opinions of the sample individuals from the media elite regarding the social media platforms most responsible for spreading rumors (N=60)

م	The motive	K	% of the total sample (60)	% of the total frequencies(174)
1	Facebook	54	90	31.03
2	X	24	40	13.79
3	Instgram	30	50	17.24
4	Youtube	48	80	27.59
5	Another mention	18	30	10.34
	Total	174		100

The previous table clearly shows that Facebook has the highest percentage as the most prevalent social media platform for spreading rumors, with a rate of 31.03% of the total occurrences, which amounted to 174 instances. This is followed by

YouTube at 27.5%, then Instagram at 17.24%, followed by platform X at 13.79%, and finally, others mentioned at 10.34%.

4. What category of news are you interested in following?

Table number(5)

Opinions of the sample individuals from the media elite regarding the category of news they are interested in following (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies(222)
1	Political	48	80	21.62
2	Economic	42	70	18.92
3	Cultural	36	60	16.22
4	Religious	30	50	13.51
5	General news	54	90	24.32
6	Other mentions	12	20	5.41
	Total	222		100

The previous table shows that the percentage of general news is the highest among the news that the media elites in the study sample are interested in following, accounting for 24.32% of the total number of occurrences, which reached 222. This is followed by political news at 21.62% of the total occurrences, then economic news at 18.92%, cultural news at 16.22%, religious news at 13.51%, and other news at 5.41%.

5. What is the category of news most susceptible to falsification?

Table number (6)

Opinions of the sample individuals from the media elite regarding the category of news most susceptible to distortion (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies (210)
1	Political News	54	90	25.71
2	Economic News	48	80	22.86
3	Social and Cultural News	42	70	20.00
4	Religious News	36	60	17.14
5	General News	30	50	14.29
6	Other mentions	0	0	0.00
	Total	210		100

The previous table shows that political news is the most subjected to distortion, accounting for 25.71% of the total occurrences, which reached 210 repetitions.

This is followed by economic news at 22.86%, then social and cultural news at 20.86%, followed by religious news at 17.14%, and general news at 14.29%. Other categories mentioned accounted for 0%.

6. Have you ever been exposed to fake news?

Table number (7)

Opinions of the sample individuals from the media elite regarding their exposure to fake news (N=60)

M	The Motive	K	% of the total sample (60)
1	Yes	20	33.3%
2	No	11	18.52%
3	Sometimes	16	25.93%
4	Rarely	13	22.22%
	Total	60	100%

The previous table shows that the percentage of media elite individuals in the study sample who encounter fake news is 33.3%, followed by "sometimes" at 25.93%, then "no" at 18.52%, and finally "rarely" at 22.22%.

7. What is the element most susceptible to forgery using artificial intelligence techniques?

Tablenumber(8)

The opinions of the sample individuals from the media elite regarding the element most susceptible to distortion using artificial intelligence techniques(N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies(126)
1	Images	54	90	42.86
2	Videos	42	70	33.33
3	Voice	30	50	23.81
	Total	126		100

It is evident from the previous table that the most susceptible elements to forgery by artificial intelligence techniques are images, accounting for 42.86% of the total number of occurrences, which reached 126 repetitions, followed by videos at 33.33%, and then audio at 23.81%.

8. If you have been exposed to fake news, do you care about verifying the accuracy of the news you encounter?

Table number(9)

Opinions of the sample individuals from the media elite regarding their exposure to fake news and the duration of their interest in verifying the accuracy of the news they encountered (N=60).

M	The motive	K	% of the total sample (60)
1	Yes	23	37.50
2	No	13	20.83
3	Some times	18	29.17
4	Rarely	8	12.50
	Total	60	100%

The previous table shows a significant increase in the rate of news accuracy verification by individuals in the study sample, reaching 37.59%. This is followed by "sometimes" at 29.17%, then "no" at 20.83%, and finally "rarely" at 12.50%.

9. How do you verify the accuracy of the news you come across?

Table number(10)

Opinions of the sample individuals from the media elite on how to verify the accuracy of the news they encounter (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies (180)
1	I am waiting to see it on traditional media	36	60	20
2	I am looking for it on other websites	54	90	30
3	I search for her on social media	42	70	23.33
4	Through discussions with colleagues or friends	48	80	26.67
5	Other mentions	0	0	0.00
	Total	180		100

From the previous table shows an increase in the percentage of individuals from the media elite who chose I am looking for it on other websites, reaching 30% of the total frequencies, which reach 180 repetitions. This is followed by “Through discussions with colleagues or friends” at 26.67%, “I search for her on social media at 23.33%%, “I am waiting to see it on traditional media” at 20%, and other mentions at 0%.

10.In your opinion, do you think that fake news harms national security?

Table number (11)

Opinions of the sample individuals from the media elite regarding the harm of fake news to national security (N=60)

M	Motive The	K	% of the total sample (60)
1	Yes	20	33.33
2	No	11	18.52
3	Some extent	16	25.93
4	Rarely	13	22.22
	Total	60	100%

The previous table shows that the percentage of agreement that fake news harms national security reached 33.33%, followed somewhat by a percentage of 25.93%, then rarely at 22.22%, and finally no at 18.52%.

11.do artificial intelligence technologies contribute to the spread of fake news?

Table number (12)

Opinions of the sample individuals from the media elite regarding the extent to which artificial intelligence technologies contribute to the spread of fake news (N=60)

M	The motive	K	% of the total sample (60)
1	Yes	22	36.00
2	No	14	24.00
3	Some extent	17	28.00
4	Rarely	7	12.00
	Total	60	100%

The previous table clearly shows a high percentage of agreement that artificial intelligence contributes to the spread of rumors, reaching 36%. This is followed to some extent by a percentage of 28%, then "no" at 24%, and finally "rarely" at 12%.

12.Have you ever been exposed to any materials used in artificial intelligence techniques to spread rumors?

Table number (13)

Opinions of the sample individuals from the media elite regarding their exposure to one of the materials used for artificial intelligence techniques to spread rumors (N=60).

M	The motive	K	% of the total sample (60)
1	Yes	35	58.33
2	No	25	41.67
	Total	60	100%

The previous table shows that the rate of exposure to fake news generated by artificial intelligence has risen to 58.33%, while the rate of non-exposure stands at 41.67%.

13. What is the nature of the elements you were exposed to?

Table number (14)

The opinions of the sample individuals from the media elite regarding the nature of the elements they were exposed to (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies (108)
1	Video	36	60	33.33
2	Image	42	70	38.89
3	Voice	30	50	27.78
	Total	108		100

The previous table shows the rising percentage of image element as the most forged element by artificial intelligence by a rate of 38.89% out of a total of 108 occurrences, followed by video at 33.33%, and then audio at 27.78%.

14. What type of fake news have you encountered before?

Table number (15)

The opinions of the sample individuals from the media elite regarding the type of fake news they have encountered (N=60)

M	The Motive	K	% of the total sample (60)	% of the total frequencies (204)
1	Political	54	90	26.47
2	International	42	70	20.59
3	Economics	36	60	17.65
4	Cultural	18	30	8.82
5	Religious	24	40	11.76
6	General news	30	50	14.71
7	Other mentions	0	0	0.00
	Total	204		100

The previous table shows that the percentage of political news is the highest among the fake news encountered by the study sample, reaching 26.47% of a total of 204 occurrences. This is followed by international news at 20.59%, economic news at 17.65%, general news at 14.71%, religious news at 11.76%, cultural news at 8.82%, and other categories at 0%.

15. What media outlet published that fake news?

Table number (16)
Opinions of the sample individuals from the media elite regarding the media outlets that spread fake news (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies (162)
1	Face book	48	80	29.63
2	X	30	50	18.52
3	Youtube	42	70	25.93
4	Instgram	30	50	18.52
5	Other mention	12	20	7.41
	Total	162		100.00

The previous table shows that the rise of Facebook as the most social media platform for spreading fake news reached 29.36%, out of a total of 162 occurrences. It is followed by YouTube at 25.93%, then Instagram and X, both at 18.52%. Other platforms are mentioned at a rate of 7.41%.

16. Do those fake news affect the national security of the country?

Table number (17)
The opinions of the sample individuals from the media elite regarding the impact of fake news on the national security of their country (N=60)

M	The motive	K	% of the total sample (60)
1	Yes	20	33.33
2	No	14	23.81
3	Some extent	17	28.57
4	Rarely	9	14.29
	Total	60	100%

The previous table shows that the approval rate for the statement "news generated by artificial intelligence harms national security" reached 33.33%, followed somewhat by a rate of 28.57% for "yes," then 23.81% for "no," and finally 14.29% for "rarely.

17. The political risks of spreading rumors and news generated by artificial intelligence and their impact on national security:

Table number (18)

The opinion of the elite on the political risks of spreading rumors and news generated by artificial intelligence and its impact on national security (N = 60)

M	The political risks of spreading rumors		Opinion			Average	Deviation	Rank
			agree	Neutral	disagree			
1	The contribution of rumors to the creation of political crises and political conflict.	K	24	26	11	2.2333	0.7316	6
		%	40.0%	42.3%	16.7%			
2	Spreading destructive criticism of state policies with the aim of undermining trust between the citizen and the political leadership.	K	38	13	9	2.4833	0.7477	2
		%	%63.3	%21.7	%15.0			
3	A means used by organizations and terrorist groups to spread terrorism within the state.	K	24	24	12	2.2	0.7466	7
		%	%40.0	%40.0	20%			
4	Circulating news and information aimed at encouraging violations of the law.	K	5	25	30	1.5833	0.6455	8
		%	%8.3	%41.7	%50.0			
5	Promoting false news aimed at tarnishing the image of political figures in the state.	K	45	10	5	2.6667	0.6289	1
		%	%75.0	%16.7	%8.3			
6	The destruction of values of loyalty and belonging to the homeland	k	38	12	10	2.4667	0.7695	3
		%	%63.3	%20.0	%16.7			
7	Publishing images and videos that incite violence	K	30	21	9	2.3500	0.7324	5
		%	%50.0	%35.0	%15.0			
8	The contribution of rumors in stirring public emotions to organize protests against state institutions.	K	35	16	9	2.4333	0.7449	4
		%	%58.3	%26.7	%15.0			

The data in the previous table refers to the political risks of spreading rumors and news generated by artificial intelligence and its impact on national security and comes as follows:

1. The first rank is Promoting false news aimed at tarnishing the image of political figures in the state.with an average 2.6667 and a standard deviation of 0.6289.
2. The second rank is spreading destructive criticism of state policies with the aim of undermining trust between the citizen and the political leadership, with an average 2.4833 and a standard deviation of 0.7477.
3. The third rank is the destruction of values of loyalty and belonging to the homeland, with an average of 2.4667 and a standard deviation of 0.7695.
4. The fourth rank is the contribution of rumors in stirring public emotions to organize protests against state institutions, with an average of 2.4333 and a standard deviation of 0.7449.
5. The fifth rank is publishing images and videos that incite violence, with an average 2.3500 and a standard deviation of 0.7324.
6. The sixth rank is The contribution of rumors to the creation of political crises and political conflict, with an average of 2.2333 and a standard deviation of 0.7316.
7. The seventh rank is publishing images and videos that incite violence, with an average 2.2 and a standard deviation of 0.7466.
8. The eighth rank is circulating news and information aimed at encouraging violations of the law, with an average of 1.5833 and a standard deviation of 0.6455.

18. The economic risks of spreading rumors and news generated by artificial intelligence and their impact on national security:

Table number (19)
The opinion of the elite on the economic risks of spreading rumors and news generated by artificial intelligence and its impact on national security (N = 60)

M	Economic Risks of Spreading Rumors		Opinion			Average	Standard Deviation	Rank
			agree	Neutral	disagree			
1	The contribution of rumors to spreading the idea of the deterioration of the economic and security situation of the state with the aim of weakening the state's economy.	k	24	23	13	2.1833	0.7700	3
		%	%40.0	%38.3	%21.7			
2	Distortion of the image and economic projects of the state	k	32	18	10	2.3667	0.7584	2
		%	%53.3	%30.0	%16.7			
3	Publishing news related to undermining trust both locally and internationally in the state's financial position.	k	36	14	10	2.4333	0.7673	1
		%	%60.0	%23.3	%16.7			

The data in the previous table refers to the economic risks of spreading rumors and news generated by artificial intelligence and their impact on national security and comes as follows.

1. The first rank is publishing news related to undermining trust both locally and internationally in the state's financial position, with an average 2.4333 and a standard deviation of 0.7673.
2. The second rank is distortion of the image and economic projects of the state with an average of 2.3667 and a standard deviation of 0.7584.
3. The third rank is the contribution of rumors to spreading the idea of the deterioration of the economic and security situation of the state with the aim of weakening the state's economy. with average 2.1833 and standard deviation is 0.7700.

19. The military risks of spreading rumors and news generated by artificial intelligence and their impact on national security:

Table number (20)

The opinion of the elite on the military risks of spreading rumors and news generated by artificial intelligence and its impact on national security (N = 60)

M	The military risks of spreading rumors		Opinion			Average	Standard deviation	Rank
			agree	Neutral	disagree			
1	Broadcasting false news and information aimed at creating division between the army and citizens.	k	38	13	9	2.4833	0.7477	2
		%	%63.3	%21.7	%15.0			
2	Weaken the national unity between citizens and the military institution to affect the security and safety of the nation.	k	35	17	8	2.4500	0.7231	4
		%	%58.3	%28.3	%13.3			
3	Diminishing the value of the armed forces' achievements	k	22	24	14	2.1333	0.7695	5
		%	%36.7	%40.0	%23.3			
4	Promoting the idea of normalization with Israel	k	40	10	10	2.5000	0.7702	1
		%	%66.7	%16.7	%16.7			
5	Provoking citizens' feelings of hatred towards the army	ك	36	16	8	2.4667	0.7241	3
		%	%60.0	%26.7	%13.3			

The data in the previous table refers to the military risks of spreading rumors and news generated by artificial intelligence and their impact on national security and comes as follows:

1. The first rank is Promoting the idea of normalization with Israel, with an average of 2.5000 and a standard deviation of 0.7702.
2. The second rank is broadcasting false news and information aimed at creating division between the army and citizens., with an average of 2.4833 and a standard deviation of 0.7477.
3. The third rank is Provoking citizens' feelings of hatred towards the army., with an average of 2.4667 and a standard deviation of 0.7241.
4. The fourth rank is weakening the national unity between citizens and military institutions to affect the security and safety of the nation. , with an average of 2.4500 and a standard deviation of 0.7231.
5. The fifth rank is diminishing the value of the armed forces' achievements, with an average of 2.1333 and a standard deviation of 0.7695.

20. The social risks of spreading rumors and news generated by artificial intelligence and their impact on national security:

Table number (21)

The opinion of the elite on the social risks of spreading rumors and news generated by artificial intelligence and its impact on national security (N = 60)

M	Social risks of spreading rumors		Opinion			Average	Standard deviation	Rank
			agree	Neutral	disagree			
1	Broadcasting false news and information with the aim of destabilizing the security and stability of society	k	45	9	6	2.6500	0.6594	1
		%	%75.0	%15.0	%10.0			
2	Spreading foreign Western cultures in society	k	36	16	8	2.4667	0.7241	3
		%	%60.0	%26.7	%13.3			

3	inciting conflicts and sectarian and religious strife with the aim of influencing social cohesion.	**k**	**23**	**23**	**14**	2.1500	0.7773	4
		%	%38.3	%38.3	%23.3			
4	Promoting false news about diseases, epidemics, and environmental disasters with the aim of frightening citizens.	**K**	**42**	**7**	**11**	2.5167	0.7917	2
		%	%70.0	%11.7	%18.3			

The data in the previous table refers to the social risks of spreading rumors and news generated by artificial intelligence, and their impact on national security comes as follows:

1. The first rank is broadcasting false news and information with the aim of destabilizing the security and stability of society, with an average 2.6500 and a standard deviation of 0.6594.
2. The second rank is Promoting false news about diseases, epidemics, and environmental disasters with the aim of frightening citizens. with average 2.5167 and standard deviation is 0.7917.
3. The third rank is spreading foreign Western cultures in society, with an average 2.4667 and a standard deviation of 0.7241.
4. The fourth rank is inciting conflicts and sectarian and religious strife with the aim of influencing social cohesion, with an average 2.1500 and a standard deviation of 2.1500.

21. From your perspective, which entities are most commonly using artificial intelligence technologies to spread rumors?

Table number (22)
The opinions of the sample individuals from the media elite regarding the entities most commonly using artificial intelligence techniques to spread rumors (N=60)

% of the total frequencies (210)	% of the total sample (60)	K	The motive	M
25.71	90	54	Face book	1
14.29	50	30	X	2
22.86	80	48	Youtube	3
17.14	60	36	Instgram	4
20.00	70	42	news and electronic sites	5
0.00	0	0	Other mentions	6
103		210	Total	

The previous table shows that Facebook had the highest percentage as the most used social media platform employing artificial intelligence techniques to spread rumors, with a rate of 25.71% out of a total of 210 occurrences. It is followed by YouTube at 22.86%, then by news and other websites at 20%, and finally Instagram at 14.29%.

22. What are the reasons for the spread of rumors and fake news generated by artificial intelligence through social media from the perspective of the study sample?

Table number (23)

The opinion of the elite on the reasons for the spread of rumors and fake news generated by artificial intelligence (N = 60)

M	Item		Opinion			Average	Standard Deviation	Rank
			agree	Neutral	Dsiagree			
1	The trust of social media users in the credibility of the information and news published on it	k	8	23	29	1.6500	0.7089	7
		%	%13.3	%38.3	%48.3			
2	The lack of security oversight on social media platforms	k	43	15	2	2.6833	0.5365	3
		%	%71.7	%25.0	%3.3			
3	The ease of sharing and reposting rumors on social media.	k	60	0	0	3.0000	0.0000	1
		%	%100	%0	%0			
4	The low level of awareness regarding the dangers of rumors and their impact on society.	k	27	27	6	2.3500	0.6594	6
		%	%45.0	%45.0	%10.0			
5	The difficulty in reaching the promoters of rumors on social media.	K	8	21	31	1.6167	0.7152	8
		%	%13.3	%35.0	%51.7			

6	The lack of deterrent laws to hold rumor mongers accountable.	**K**	**38**	**13**	**9**	2.4833	0.7477	4
		%	%63.3	%21.7	%15.0			
7	The official state media's lack of interest in correcting rumors and fabricated news.	**K**	**30**	**23**	**7**	2.3833	0.6911	5
		%	%50.0	%38.3	%11.7			
8	The limited ability to analyze the information presented in news produced by artificial intelligence and to determine its accuracy.	**K**	**45**	**14**	**1**	2.7333	0.4825	2
		%	%75.0	%23.3	%1.7			
9	Lack of awareness about artificial intelligence techniques and how to employ them in news fabrication.	**k**	**60**	**0**	**0**	3.0000	0.0000	1
		%	%100	%0	%0			

From the previous table, the reasons for the spread of rumors and fake news generated by artificial intelligence come as follows:

1. The first rank is the ease of sharing and reposting rumors on social media and the lack of awareness about artificial intelligence techniques and how to employ them in news fabrication, with an average 3.0000 and a standard deviation of 0.0000.
2. The second rank is the limited ability to analyze the information presented in news produced by artificial intelligence and to determine its accuracy., with an average 2.7333 and a standard deviation of 0.4825.
3. The third rank is the lack of security oversight on social media platforms, with an average 2.6833 and a standard deviation of 0.5365.
4. The fourth rank is the lack of deterrent laws to hold rumor mongers accountable., with an average 2.4833 and a standard deviation of 0.7477.

5. The fifth rank is the official state media's lack of interest in correcting rumors and fabricated news, with an average 2.3833 and a standard deviation of 0.6911.
6. The sixth rank is the low level of awareness regarding the dangers of rumors and their impact on society., with an average 2.3500 and a standard deviation of 0.6594.
7. The seventh rank is the trust of social media users in the credibility of the information and news published on it, with an average of 2.7333 and a standard deviation of 0.4825.
8. The eighth rank is the difficulty in reaching the promoters of rumors on social media, with an average of 1.6167 and a standard deviation of 0.7152.

23. From your perspective, is it possible to curb the spread of fake news generated by artificial intelligence technologies?

Table number (24)

The opinions of the sample individuals from the media elite regarding the possibility of limiting the spread of fake news generated through artificial intelligence technologies (N=60)

M	The motive	K	% of the total sample (60)
1	Yes	21	35
2	No	6	10
3	Some extent	18	30
4	Rarely	15	25
	Total	60	100

The previous table shows that the approval rate for the possibility of combating the spread of fake news using artificial intelligence techniques is 35%, followed somewhat by 30%, then rarely at 25%, and finally not at all at 10%.

Study samples said the ways to combat fake news created with artificial intelligence are:

1. Spread the real news in the governmental media.
2. Accurate programming.
3. Raising public awareness about artificial intelligence and increasing parties working to spread correct news and correct fabricated news
4. Through applications that detect deep-fabricated news.
5. Through filtering algorisms to fake news.
6. Through fact-checking techniques.
7. Continuously spread the correct news.
8. Establish strict laws and legislation that criminalize the fabrication of news.
9. Raising awareness of the dangers of using artificial intelligence technologies.
10. Through auditing applications, multiple searches for sources, and the separation of fabricated videos.

24. Does public awareness of artificial intelligence techniques and their risks help to effectively reduce the spread of fake news?

Table number (25)
The opinions of the sample individuals from the media elite regarding their assistance in raising public awareness about artificial intelligence technologies and their risks (N=60)

M	The motive	K	% of the total sample (60)
1	Yes	25	42.11
2	No	0	0.00
3	Some extent	22	36.84
4	Rarely	13	21.05
	Total	60	100%

The previous table clearly shows an increase in the percentage of agreement that public awareness of artificial intelligence techniques and their risks limits the spread of fake news, reaching 42.11%. This is followed to some extent by a percentage of 36.84%, and rarely by a percentage of 21.05%.

The study sample mentioned the measures that countries must take to protect their national security against electronic crimes and fake news, like:

1. Tightening penalties on media outlets for promoting fake news
2. Increased awareness, transparency, and immediate and direct response to rumors.
3. They issued legislation for severe punishment against those who commit such crimes.
4. Implementing strict laws against cybercrime perpetrators, rumor mongers, and anyone who fakes images, videos, and audio.
5. Employing artificial intelligence _legislation and laws_ education.
6. Legislating some laws and implementing them technically on digital media.
7. Continuous awareness campaigns, seminars, and workshops for digital media education.
8. Activating the laws that punish these crimes.
9. New legislation.
10. Applying and developing laws to suit new changes.

25. What are the groups most in need of awareness about fake news generated by artificial intelligence?

Table number (26)
Opinions of the sample individuals from the media elite regarding the groups most in need of awareness about fake news produced by artificial intelligence (N=60)

M	The motive	K	% of the total sample (60)	% of the total frequencies(198)
1	University Youth	48	80	24.24
2	Elderly	42	70	21.21
3	Businessmen	24	40	12.12
4	Journalists	36	60	18.18
5	Politicians	30	50	15.15
6	Other mentions	18	30	9.09
	Total	198		100

The previous table clearly shows that university youth represent the most in need of public awareness regarding the dangers of fake news generated by artificial intelligence, accounting for 24.24% of a total of 198 occurrences. This is followed by the elderly at 21.21%, journalists at 18.18%, politicians at 15.15%, businesspeople at 12.12%, and others at 9.09%.

26. What are the most effective methods for raising public awareness about the dangers of artificial intelligence in spreading fake news generated by AI?

Table number (27)
The opinions of the sample individuals from the media elite regarding the most effective methods for raising public awareness about the dangers of artificial intelligence in the dissemination of fake news generated by AI (N=60)

M	The motive	Opinions	% of the total sample (60)	% of the total frequencies(204)
1	Through traditional media	36	60	33.33
2	Through social media	42	70	38.89
3	Through conferences and scientific workshops	30	50	27.78
4	Other mentions	0	0	0.00
	Total	108		100

The previous table clearly shows the rise in the percentage of social media as the most suitable means for public awareness of the dangers of artificial intelligence in spreading fake news, reaching 38.89% of a total of 204 occurrences. This is followed by traditional media at 33.33%, and then conferences and scientific workshops at 27.78%.

27.what are the most effective methods to combat fake news?

Table number (28)
The Opinions of the sample individuals from the media elite on the most effective methods to combat fake news (N=60)

M	Motivation	K	% of the total sample (60)	% of the total frequencies(210)
1	Issuing legislation to eliminate fake news	30	50	14.29
2	Criminal prosecution and imposing penalties on rumor mongers	42	70	20.00
3	Awareness of educational institutions for students about the uses of artificial intelligence and the risks of its use	24	40	11.43
4	Cash handling with media materials	30	50	14.29
5	the employment of artificial intelligence techniques in detecting fake news	36	60	17.14
6	Laws Regulating the Limits of Artificial Intelligence Usage	48	80	22.86
7	Other mentions	0	0	0.00
	Total	210		100

The previous table clearly shows the rise percentage of laws regulating the limits of artificial intelligence usage as the most effective methods to combat fake news, reaching 22.86% of a total of 210 frequencies , then criminal prosecution and imposing penalties on rumor mongers at 20%, then the employment of artificial intelligence techniques in detecting fake news at 17.14%, then issuing legislation to eliminate fake news and cash handling with media materials at 14.29%, and then awareness of educational institutions for students about the uses of artificial intelligence and the risks of its use at 11.43%.

Results of the study hypothesis validity test:

The first hypothesis:

There is a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and the spread of rumors.

Table (29)
It illustrates the significance of the relationship between the rate of artificial intelligence employment in news fabrication and the spread of rumors.

Variables		Correlation Coefficient	Significance
The level of spreading fake news related to artificial intelligence techniques	The level of spreading rumors	**0.579	0.001 Function

The results of the statistical transactions in the previous table indicate a statistically significant moderate positive correlation between the level of artificial intelligence employment in news fabrication and rumor spreading, as the Pearson correlation coefficient value reached (0.579), which is statistically significant at a significance level of 0.001. Therefore, it can be stated that the first hypothesis is confirmed, demonstrating a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and rumor spreading.

The second hypothesis:

There is a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and its impact on national security

Table (30)
It illustrates the significance of the relationship between the rate of artificial intelligence employment in news manipulation and its impact on national security

Variables		Correlation Coefficient	Significance
The rate of AI employment in news fabrication	Impact level on national security	**0.726	0.001 Function

The results of the statistical transactions in the previous table indicate a strong positive correlation with statistical significance between the level of artificial intelligence employment in news fabrication and its impact on national security. The Pearson correlation coefficient was found to be (0.726), which is statistically significant at a significance level of 0.001. Therefore, it can be stated that the second hypothesis is confirmed, demonstrating a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and its impact on national security.

The third hypothesis:

There is a statistically significant correlation between the type of news that is most distorted and its impact on national security.

Table (31)

It illustrates the significance of the relationship between the type of news that is most distorted and its impact on national security.

The connection with the level of impact on national security, political risks, economic risks, military risks, and social risks.

Type of news: Political	Political	**0.881	**0.677	**0.893	**0.917	**0.915
	International	**0.804	**0.877	**0.683	**0.551	**0.420
	Economic	**0.709	**0.844	**0.904	**0.792	**0.807
	Cultural	**0.473	**0.537	**0.339	**0.456	**0.575
	Religious	**0.582	**0.633	**0.302	**0.477	**0.641
	General news	**0.438	**0.277	**0.236	**0.279	**0.257

The results of the statistical transactions in the previous table indicate a positive correlation, ranging from weak to strong, with statistical significance between the type of news that is most distorted and its impact on national security. The Pearson correlation coefficient values ranged from (0.236) to (0.917), which are statistically significant at a significance level of 0.001. Therefore, it can be stated that the third hypothesis is confirmed, demonstrating a statistically significant correlation between the type of news that is most distorted and its impact.

The fourth hypothesis:

There is a statistically significant correlation between the rate of using social media for artificial intelligence techniques in fabricating news and spreading rumors.

Table (32)

It illustrates the significance of the relationship between the rate of social media use of artificial intelligence techniques in fabricating news and spreading rumors.

Variables		**Correlation Coefficient**	**Significance**
The rate of social media employment of artificial intelligence techniques in news falsification:	rumor spreading	**0.830	0.001 Function

The results of the statistical transactions in the previous table indicate a strong positive correlation with statistical significance between the rate of employing social media for artificial intelligence techniques in news fabrication and rumor spreading. The value of the Pearson correlation coefficient reached (0.830), which is statistically significant at a significance level of 0.001. Therefore, it can be concluded that the fourth hypothesis is confirmed, demonstrating a statistically significant correlation between the rate of employing artificial intelligence in news fabrication and rumor dissemination.

The fifth hypothesis: There is a statistically significant correlation between the rate of exposure to fake news generated by artificial intelligence and its impact on national security.

Table (33)
It illustrates the significance of the relationship between the rate of exposure to fake news generated by artificial intelligence and its impact on national security.

Variables		Correlation Coefficient	Significance
The rate of exposure to fake news generated by artificial intelligence:	impact on national security	**0.759	0.001

The results of the statistical transactions in the previous table indicate a strong positive correlation with statistical significance between the rate of exposure to fake news generated by artificial intelligence and its impact on national security. The value of the Pearson correlation coefficient reached (0.759), which is statistically significant at a significance level of 0.001. Therefore, it can be concluded that the fifth hypothesis is confirmed, indicating a statistically significant correlation between the rate of exposure to fake news generated by artificial intelligence and its impact on national security.

General results for the study:

1. Through the analysis of the study, it was found that most of the fabricated news is related to political news.
2. Also, most of the fabricated news is related to presidential news to serve political aims or specific parties, to gain public sympathy, or to hide facts from the public.

3.Most fake photos were fabricated using deep fake techniques and by some fabricated photo sites like "Midjourney, Copilot, AI Studio, Prompts, and Dall-E.".

4.A lot of fabricated photos were posted on social media sites, especially Facebook.

5.Some electronic journal sites are interested in publishing the correct news and discrediting fabricated news.

6.Most of the study samples said they were exposed to fake news via Facebook more than any other site.

7.Most of the study samples said political news is the most likely to be faked.

8.Most of the study sample chose photos as the most element that can be faked.

9.Most of the study samples said the fake news can harm national security.

10.The study samples agreed that the fake news is fueling electoral violence, ethno-religious conflicts, leadership mistrust, and jungle justice, among others.

11.Most of the study sample said the reasons for the spread of rumors and fake news generated by artificial intelligence are the trust of social media users in the credibility of the information and news published on it comes in the first rank, then The lack of security oversight on social media platforms comes in the second rank, and then the ease of sharing and reposting rumors on social media comes in the third rank. This result agrees with a study for (Albara Awajan & Outaz Alazab & Ruba Abu Khurma2022) that confirmed that social media allows sharing a lot of fake data with low cost and easy access. This causes a harmful impact on individuals and society.

12.Most study samples said the ways to combat the fake news created with artificial intelligence are through spreading the real news in governmental media, raising awareness of the dangers of using artificial intelligence technologies, Establish strict laws and legislation that criminalize the fabrication of news and use fact-checking techniques.

13.Most of the study sample chose social media and traditional media as the most effective methods for raising public awareness about the dangers of artificial intelligence in spreading fake news generated by AI.

14.Most of the study samples said university youth and elders are the most needed to be aware of the dangers of artificial intelligence techniques.

15.The study sample mentioned the measures that countries must take to protect their national security against electronic crimes and fake news through continuous awareness campaigns, seminars and workshops for digital media education, implementing strict laws against cybercrime perpetrators, rumor

mongers, and anyone who fakes images, videos, and audio, and increasing awareness, transparency, and immediate and direct response to rumors.

16. There is a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and the spread of rumors.
17. There is a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and its impact on national security.
18. is a statistically significant correlation between the type of news that is most distorted and its impact on national security.
19. There is a statistically significant correlation between the rate of using social media for artificial intelligence techniques in fabricating news and spreading rumors.
20. There is a statistically significant correlation between the rate of exposure to fake news generated by artificial intelligence and its impact on national security.

Conclusion:

We may infer from the survey study of random samples of fake news that political news _particularly presidential news_ is the most frequently faked, particularly during times of political unrest. These fake news stories are frequently spread to support governmental objectives, gain popular sympathy, and serve the interests of particular political parties or individuals. Some AI programs, such as Midjourney, Copilot, AI Studio, Prompts, and Dall-E, were responsible for fabricating the majority of the fake news. Correcting false information is something that some government media outlets are interested in doing, and occasionally online news sites also take similar action.

We may infer from the field study with a sample of AI specialists that the majority of the sample study concurred that Facebook and YouTube are the most popular platforms for disseminating false information, especially fake photos, which are the most common element that spreads quickly. Also, most of the study sample agreed that artificial intelligence techniques help increase fake news because some AI techniques are easy to use in fabricated photos. And also, fake news is fueling electoral violence, ethno-religious conflicts, leadership mistrust, jungle justice, Therefore, most of the study sample agreed that it is necessary to spread the real news in governmental media, raising awareness of the dangers of using artificial intelligence technologies. Establish strict laws and legislation that criminalize the fabrication of news and use fact-checking techniques to combat fake news. The results of the study showed the effect of the technological revolution on information flows, spreading rumors, and appearing new technologies as artificial intelligence techniques as a result of the technology development, which led to the

ability to fabricate photos, videos, and also sounds. We all see a lot of fabricated photos and videos for politicians and famous people, all of which are results of using artificial intelligence techniques, which may affect national security. As the public sphere theory confirmed, technological developments, the digital revolution, and the appearance of social media platforms opened the sphere in front of their users for discussions and news deliberation, and the appearance of artificial intelligence techniques facilitated spreading fabrication news in a wide area, and this result agrees with a study for (Nadine Liv, Dov Greenbaum 2020),which confirmed that deep fakes have rapidly emerged as one of the most ominous concerns within modern society. The ability to easily and cheaply generate convincing images, audio, and video via artificial intelligence will have repercussions within politics, privacy, law, security, and broadly across all of society. In light of the widespread apprehension, numerous technological efforts.

As well, the study proved the main hypothesis that there is a statistically significant correlation between the rate of artificial intelligence employment in news fabrication and its impact on national security, and this result agreed with a study for (Samah Muhammad Lotfy 2023),which confirmed the presence of many risks for the crimes of spreading rumors on Egyptian national security at the (political, social, economic, military, and intellectual) levels.

Study recommendations:

1. It is necessary to conduct studies about the role of artificial intelligence in spreading fake news.
2. It is necessary to hold workshops about the methods and techniques of artificial intelligence used in fabricating photos, videos, and voices.
3. It is important to make awareness campaigns in governmental media and social media platforms about the dangers of fake news and how to combat and reduce it.
4. It is essential to issue strict laws against cybercrime perpetrators, rumor mongers, and anyone who fakes images, videos, and audio by AI.
5. It is important to hold workshops for journalists about the methods and programs for detecting fake news.
6. The governmental media should have a unit that is responsible for spreading facts and correcting misinformation.

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