

"The role of Artificial Intelligence in shaping the future of Media production and the application of Algorithm bias theory in Storytelling"

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Abstract

Generative artificial intelligence (GenAI or GAI) is a sub category of artificial intelligence that uses its capabilities to generate photos, text, animated GIF, 3D images, voice, and any type of media. There are many applications that are web-based, open sources, and downloadable that help in this function. So, this paper is mainly exploring in a practical observation and group trials some generative AI tools and their impact on media production and storytelling.

This study shed the light on the future of media production regarding social media platform analytics, AI applications, newsroom and journalistic media production, and Algorithm curation. It aims to compare between the algorithm bias of media production and storytelling from an actual data processing of three AI-powered web-based platforms storynest.ai, charism.ai. and deepai.org. The research study depends on qualitative comparative analysis of the last three AI-powered webbased applications with textual story and visual attachment as unit of comparison. The aim behind choosing those three apps. is the far differentiation between the function of each one when talking about generative artificial intelligence.

The study concluded that Internet algorithms use what users feed the search bar with, and the fact that AI can control the users' preferences is a myth; because simply digital platforms create the content that users request.

Keywords

Algorithmic Curation, AI-powered apps., storynest.ai, charisma.ai, deepai.org, Filter Bubbles and Echo Chambers, Web-based AI platforms.

دور الذكاء الاصطناعي في تشكيل مستقبل الإنتاج الإعلامي وتطبيق نظرية التحيز الخوارزمي في رواية القصص أ.د. مها الطرابيشي استاذ بقسم العلاقات العامة والاعلان – كلية الاعلام – جامعة اكتوبر للعلوم الحديثة والأداب MSA د. ماري حبيب مدرس بقسم الاذاعة والتليفزيون – كلية الاعلام – جامعة اكتوبر للعلوم الحديثة والأداب

الملخص

الذكاء الاصطناعي التوليذي (GenAI) أو(GAI) هو فئة فرعية من الذكاء الاصطناعي تستخدم قدراتها لإنشاء الصور والنصوص وصور المتحركة وثلاثية الابعاد والصوت وأي نوع من الوسائط المتعددة. هناك العديد من التطبيقات المستندة إلى الويب والمصادر المفتوحة والقابلة للتنزيل والتي تساعد في هذه الوظيفة. لذلك تستكشف هذه الورقة بشكل أساسي في الملاحظة العملية والتجارب الجماعية بعض أدوات الذكاء الاصطناعي التوليدية وتأثير ها على الإنتاج الإعلامي ورواية القصص. سلطت هذه الدراسة الضوء على مستقبل الإنتاج الإعلامي فيما يتعلق بتحليلات منصات التواصل الاجتماعي، وتطبيقات الذكاء الاصطناعي، وغرف الأخبار والإنتاج الإعلامي الصحفي، وتنظيم الخوارزميات. يهدف إلى المقارنة بين التحيز الخوارزمي الإسطناعي، وغرف الأخبار والإنتاج الإعلامي الصحفي، وتنظيم الخوارزميات. يهدف إلى المقارنة بين التحيز الخوارزمي مثل الاصطناعي، ورواية القصص من معالجة البيانات الفعلية لثلاث منصات قائمة على الويب تعمل بنظام الذكاء مثل Storynest.ai – Charisma.ai – Deepai.or الاصطناعي مع القصة النحاء المقارن النوعي للتطبيقات الثلاثة الأخيرة المستندة إلى الويب التي تعمل بنظام الذكاء وطيفة كل منها عند الحراسة الصوري المقارن النوعي للتطبيقات الثلاثة المحيرة منصات قائمة على الويب تعمل بنظام الذكاء وظيفة كل منها على معالمة الديان الفعلية الثلاث منصات قائمة على الويب تعمل بنظام الذكاء الاصطناعي مثل الاصطناعي مع التحليل المقارن النوعي للتطبيقات الثلاثة الأخيرة المستندة إلى الويب التي تعمل بنظام الذكاء وطيفة كل منها عند الحديث عن الذكاء الاصطناعي التوليدي.

خلصت الدراسة إلى أن خوارزميات الإنترنت تستخدم ما يغذي به المستخدمون شريط البحث، وحقيقة أن الذكاء الاصطناعي يمكنه التحكم في تفضيلات المستخدمين هي خرافة. لأن المنصات الرقمية ببساطة تخلق المحتوى الذي يطلبه المستخدمون.

الكلمات الافتتاحية

المعالجة الخوارزمية - التطبيقات التي تعمل بنظام الذكاء الاصطناعي - نظرية فقاعات التصفية وغرف الصدى - منصات الذكاء الاصطناعي المستندة إلى الويب – Storynest.ai – Charisma.ai – Deepai.org

Introduction

Our world is facing increasingly complex challenges, but with the combination of human and machine Intelligence, cybernetic communication, human being and machine relations, we can find and create solutions to many contemporary problems by the help of artificial intelligence (AI).

Moreover, AI is becoming more and more significant in the media study, in general and the media production and storytelling in particular. Utilizing AI to enhance user experience and deliver more pertinent information drives web-based AI powered platforms and applications to understand user behavior and preference; hence AI analyze users' data by Chat-bots, tracking, and algorithm.

Many Internet users nowadays are usi/.ng AI applications for photo retouching, generating stories to share on their social media pages, generate photos for them and their families after five years from now. For sure these options need from the user to upload their profile pictures, mention their gender, age, marital status, number of children, and any other preference for the application to be able to generate media that is suitable for the user preferences.

Therefore, when speaking about generative AI, some terminologies should be addressed like Hallucination, Transfer learning, Multimodal AI, Lang-chain, and Generative Adversarial Networks (GANs). All of these are the most important components in the small world of AI.



This study shed the light on the future of media production regarding social media platform analytics, AI applications, newsroom and journalistic media production, and Algorithm curation. It aims to compare between the algorithm bias of media production and storytelling from an actual data processing of three AI-powered web-based platforms storynest.ai, charism.ai. and deepai.org.

Related Works

Speaking about the role of Artificial Intelligence (AI) in shaping the future of media production; many years ago, Copeland (1993) in his book "Artificial Intelligence: philosophical Introduction" for AI progress said: it is a great power of digital computing by a controlled machine to do human being tasks much easily and more quickly. These words have frequently been used to focus on the development of AI to think and predict for the user their coming steps that all happens by *generalization* and *learning* from the user-experience preference/feedbacks. Computer digital development showed that computers can be programmed to do huge number of difficult tasks like solving mathematical problem, playing chess professionally, editing images better than photoshop, creates text and translate linguistics for experts, acting job wisely instead of Final Cut Pro, and finally generating multimedia has been achieved in minuets by the use of AI tools.

Kotler's (2017) sense of customer value state that during the last five years, the duration of Internet users' concentration has decreased from 90 to 30 seconds. So as a result, the company that publishes its products or services first will absorb the viewer's attention immediately and the only suggestion is creating algorithms that take content's relevance and timeliness into account by promoting openness and diversity in content creation.

Using AI in storytelling and multimedia production can be shown in real examples that happened in screenwriting, plot structure and outlines, story idea generation, predictive modeling and coherent narratives, language style, phrasing, character creation and development, revision and proofreading. This part will compile both literature and practical reviews to illustrate AI Tech. implementation in storytelling and media production.

A systematic review for the AI technologies in story-writing explored its approaches, types and roles. According to Fang (2023), AI developers have some approaches for trained applications specialized in storytelling and media production starting from the primitive till very advanced

approaches; planning-based models that include goal-directed approach (like simulation, gaming, voice agent) \rightarrow Machine learning models that include script learning and story completion.

He also added that the main roles of AI technologies in storytelling are storycocreation/collaborator, story generator, and story animator. These roles can be shown in the three main types of AI technologies specialized for storytelling; (1) story-writing collaborative agents that help users to create stories by generating sentences and storyline ideas, (2) storytelling agents that users express story thoughts into visual and audio, and (3) story animated agents that help users create motion comics and 3D animated characters. Here are some famous examples:

Story-writing collaborative agents						
CodeToon	AI conversational authoring tool for generating comics from code –	2022	Programing			
	Canadian based pro-type version		by Python			
	https://codetoon.uwaterloo.ca/					
Wordkraft	AI copywriting and Online content generator - https://wordkraft.ai/	2021	Web-based			
BunCho	Al supported Co-creation - unsupervised multitask learning model –	2021	Japanese			
	GPT 2 – BunCho means sentence bird in Japanese		model			
MEGATRON-	AI novel framework of pre-trained language model	2020	Chinese			
CTRL			model			
Storytelling Agent						
SAGA	AI asynchronous collaborative storytelling system – GPT 3	2021	Canadian			
			model			

Regarding storytelling and its importance to children-computer interaction, Jennifer et al. (2022) designed in their paper a meta-story chat tool named: "AI Fan Along" prototype. A mapping of Natural Language Processor (NLP), Machine Learning (ML), and Deep Learning (DL) models allows children to safely engage with their favorite characters on television shows through voice-assisted technology. And at the end of the episode, the child will be encouraged to speak to the characters and reflect on the events by giving suggestions and predictions for the next episode.

Using AI in applications have exceeded the performance level of human specialists and professionals in trying to do some tasks, such as Chatbot that recognize voice and handwriting. As

in a Spanish study, about 366 journalists used chatbots in 50 projects as their sources for media production materials in creating their stories and they think that automation is doing well and they don't mind using it in their future news gathering (Túñez, 2018).

Using AI in social media platform analytics and multimedia production has been a basic daily routine for developers and users too. Kaput et al. (2022), in their book; "Marketing AI and the Future of Business" states that Facebook has used AI to predict customer behaviors (Ch. 6), media content generation like product description and social media post (Ch. 8), and run personalized *campaigns* with unprecedented complexity and remarkable simplicity (Ch. 14). YouTube recommends reels and videos related to the viewer's previous watching and search history to simulate consumers' interest depending on previous searches and views. Additionally, TikTok on mobile phone applications uses detective AI to produce similar contents which is labeled as automated AI-generated content for the same videos users liked or watched till the end.

Social Network Sites (SNS) use AI in successful online marketing campaigns that are more content specialized with smarter reach (Verma, 2021). Content is prioritized, users' involvement and engagement are considered in setting the marketing agenda. SNS enable users to actively participate in supplying features that let users discuss and share their opinions on crucial issues; which can improve the overall user experience by fostering communal participation.

Using AI in newsroom and journalistic multimedia production is examined in this study from the viewpoints of academics, specialists, and journalists (Fieiras, 2022 - Noain, 2022 - Túñez et al., 2020 and 2021). While AI creates fear and hostility among journalists, it also opens up new markets and improves journalists' job career by enabling them to concentrate on qualitative reporting, research, or locating witnesses and information.

The two main areas for using AI in newsrooms are content generation and personalization (de-Lima-Santos et al., 2021); in which AI tools can generate large pieces of news and personalized marketing content that reach broader audience and allowing users to create generalized thoughts about the created news agendas. However, concerns about quality and plurality arise, as content personalization might provoke lack of diversity and reinforce users' beliefs. Additionally, AI algorithms may erode editorial control, provoking bias at various levels of production.

These previous studies may raise the issue of setting agenda specific for Internet Users by using **Algorithmic Curation** in which generative AI (GAN); i.e. images, text, and music, can produce customized websites in accordance with users' choices and needs (Khan, 2023). This technique is happened simply by using algorithms to filter and rank online media content based on user preferences, behaviors, and interests from search engine and social media products such as the Twitter feed, Facebook's News Feed, and the Google Personalized Search. Then, a promoted, informed and inclusive conversation on significant issues that are collected previously, will appear again to the same Internet users to participate and got engaged in it by sharing or commenting, so that balancing algorithmic curation with user agency is achieved.

Theoretical Framework

The researchers will apply the Filter bubbles and echo chambers theory, in addition to the Algorithm Bias theory to help explain the role of artificial intelligence on shaping the future of media production and storytelling by the use of AI-powered platforms.

Filter bubbles and echo chambers Theory

Filter bubbles term was created by Eli Pariser (2011) in his book: "The Filter Bubble: What the Internet Is Hiding from You." The book suggested that television now is not just a device, it is an embedded intelligent automated helper (Ch. 1) that engage users in the advertisement and news content production (Ch. 2).

The user is the content, as discussed by the book author; proposed that the algorithms used by online and digital platforms show users the content they are likely to engage with. This can create "filter bubbles" where users only see information that reinforces their existing views. This lack of exposure to diverse opinions can lead to the formation of "echo chambers" where people only hear opinions similar to their own.

According to Eli Pariser in an article written for CNN (2021), those algorithms create "a unique universe of information for each of us, which fundamentally alters the way we encounter ideas and information." So, if the user search about the word "depression" for example, the Internet websites install tracking sensors of about 64 data-laden cookies and beacons on the user computer to send them all information about depression and anti-depression solutions.

Using online recommender system (Tien, 2014) in the form of user-generated tags makes Internet users consume more media that is produced for them specially and in return when positive recommendations are given more and more multimedia is generated for them.

Finally, the theory predicted that individualized and personalization carried out by AI-based algorithmic curation or filtering would lead to intellectual isolation and social fragmentation. In storytelling (Kustritz, 2022), this can affect the way narratives are crafted and consumed. For instance, AI technologies can be used to generate personalized stories for readers, adapting the plot or characters based on the reader's preferences. However, this also raises concerns about the echo chamber effect, where stories may become too insular and fail to challenge readers with new ideas or viewpoints (MIT Technology Reviews, 2018)

9

Algorithmic bias Theory:

The algorithms and AI systems can exhibit unintended biases based on the data they are trained on. This can lead to systems that display discriminatory behaviors towards certain groups. Algorithmic bias refers to the lack of fairness in the outputs generated by an algorithm. These biases may include age discrimination, gender bias, and racial bias. It could intensify inequalities among people and affect their lives. Another risk is that a person's chances of landing a job they deserve could be reduced, simply because they belong to group that the algorithm is biased against. The algorithms used by social media platforms tend to only show users content that they are likely to engage with. This can create "filter bubbles" where users only see information that reinforces their existing views. This lack of exposure to diverse opinions can lead to the formation of "echo chambers" where people only hear opinions similar to their own.

There are two prominent reasons why the training data could cause algorithmic biases. Firstly, it could be caused by personal biases that the data gatherers themselves hold. Secondly, it could be because of environmental biases that could have been imposed unintentionally (or even intentionally) while the data was being gathered.

The people who are gathering the data most likely have biases that they are not even aware of and they end up projecting those biases on the actual data collection processes. The algorithm may not even be trained on enough data that can represent the actual scenario that the AI system is expected to operate in. For example, there have been instances where algorithms were trained on data pertinent only to Caucasians. In those situations, the systems have ended up generating outputs that are racially biased. Similarly, an artificial intelligence system may be trained on data sourced from and about one region, while the system is intended to be used worldwide. It would not be surprising that such a system would generate biased outputs.

About Web-based AI-Powered Platforms: credit generated by Chat-GPT

1. www.storynest.ai

"StoryNest.ai is an AI-powered platform that offers personalized and interactive storytelling for children. The platform allows parents to craft personalized stories based on their child's preferences, with multilingual support and other features like character chats and narrated stories to enhance the overall experience.

With the option for users to choose from a range of categories, age groups, and writing styles, StoryNest.ai generates unique narratives that are tailored to user preferences.

The platform also encourages creativity and imagination by offering users the opportunity to create their stories, choosing from range of characters, settings, and plots.

The AI-powered software allows users to talk to and engage with characters from their stories, creating a more immersive and interactive reading experience.

This feature is available with the Pro-version, as is the option to create full-length storybooks. The platform supports creation in over ten languages, further enhancing its accessibility and appeal. It also offers Narrated Stories, adding an auditory dimension to the experience."

2. <u>www.charisma.ai</u>

"Charisma is an AI-powered platform for creating interactive stories with virtual characters. It uses advanced machine learning and natural language processing to understand conversations and enable dynamic storytelling.

The platform supports a wide range of state-of-the-art voices and integrates with Unreal Engine, Unity, JavaScript, React, React Native, Python, and Decentraland.

Charisma is free to create and publish interactive stories and can be used in various applications such as entertainment, education, training, and simulations.

It is equipped with features like emotion, memory, scenes, and subplots, and has analytics deadcenter in the story editor, making it easy to track conversations in real-time and fine-tune storylines. Charisma also supports contextual interactions between characters, allowing for more immersive and memorable experiences."

3. <u>www.deepai.org</u>

"The Text to Image – AI Image Generator API is a tool that utilizes AI technology to create unique images from text descriptions. It allows users to input a text prompt and generates an image based on the given description.

This tool can be used for various purposes, such as generating AI art or for entertainment purposes. It is important to note that the generated images may not have photorealistic quality due to limitations of the AI system.

Achieving photorealism would require a significantly larger AI system. Users can experiment with different text prompts to generate images. For example, they can try describing a balloon in a shape that is not typically seen in balloon form.

The generated images are unique each time, adding an element of surprise and novelty. The tool provides different style options for generating images, such as cute creatures, fantasy worlds, cyberpunk themes, and others.

However, it may be necessary to upgrade to a PRO account to access certain styles. The tool also offers additional options, including the ability to select the shape of the generated image and the ability to enhance the image.

Users can download the generated images or continue to explore and experiment with different text prompts."

Why specially choosing these three AI-powered platforms?

1. www.storynest.ai

- It is an American US based AI platform, founded by Indian company of Bharat Golchha. It is very well developed and easy platform compared with alternatives.
- In addition to that the platform is updated with six versions now since have been launched on April 2024: creating comic storyboards, character creation, linking characters across multiple stories, improvement for story and novel creation tools like grammar checking and style enhanced editing features, quantum leap in AI storytelling for cultural and historical backgrounds.
- The platform is both generating text and image. It is also having the option of "story forge" management tool that organizes story plot, characters, locations, conflict, challenges, narrative style, story outline and synopsis.
- API key is also available for developers who want to integrate the generated story in their applications.

2. <u>www.charisma.ai</u>

- It is been used by BBC in creating interactive digital content for their stories. BBC created *Writersroom* team who makes use of talented writers across UK and take their stories to create an AI storytelling project with the help of AI platform Charisma.ai.
- The team created *Connected Studio MakerBox* community for the writers to join and discover the AI technology that will be used in transforming their stories into digital storytelling content.
- Then the *Writersroom* Team publish the created AI stories on BBC Taster platform for users to try, rate, and share the AI stories created by Charisma.ai
- This platform is also used by Warner Bros, Dream Works, and Sky TV.

From the previous information, the platform needs a full imagination for characters, plot, subplot, memories, intents, categories and media to generate the digital story.

3. <u>www.deepai.org</u>

• It is proportionally older than both other two AI powered platforms, it is chosen, for the sake of this study, to be a **control subject** in comparative analysis method.

Methodology

The paper is following Qualitative Comparative Analysis (QCA) methodology for three web-based

AI-powered platforms; <u>www.storynest.ai</u>, <u>www.charisma.ai</u>, and <u>www.deepai.org</u>. It

systematically compares story generated about "Harvesting orange plant in Egypt and exporting

it," to identify similarities and differences in order to enhance deep understanding of the future of

AI in shaping media production and the algorithm bias of storytelling by using AI platforms.

Here are the key aspects of the comparison, shown in the following table:

Unit of comparisons	Textual stories and visual attachments			
Dimensions of comparison	- Easiness of finding platform on search engines (google, bing)			
-	- Generated Titles for each story			
	- Generated photos for each story			
	- API Access availability (It is the key offered from web-based AI			
	platforms for the story to be easily inserted in games)			
	- How real and relevant the generated content to the text prompt			
	- How it works, video tutorials (Help button or questions)			
	- Professional options (Paid plans)			
	- Easiness of usage			
	 Friendly-user website 			
	• Generation prompt trials (it is the number of times the AI			
	generate new stories and new photos)			
	 Procedures required before generating the prompt 			
Qualitative data collection	- User-experience (researchers' interactions with the web-based AI			
	platforms; generating stories and photos)			
	- Observation			
	- Group trials			
Independent analysis	- Using the same searching input for three web-based AI powered			
	platforms: "Writing story about orange fruit harvest in Egypt and the			
	procedures of distribution and exporting"			
	- The researchers generated real stories that will be used in the analysis by			
	the use of comparison dimensions.			
Side-by-side comparison	Using Deepai.org AI web-based platform that is older relatively than the			
	other two, it is also having many other features like generating videos,			
	music, beside the text and photo.			
Pattern interpretation	Charisma.ai and BBC case study			
Validation of findings	20 different users entered the same input from different computers to test			
	tracking, algorithm bias, and user-preferences results from the three AI			
	web-based platforms.			

Generated story by Storynest.ai

Title: The Golden Harvest: Uncovering the Secrets of Egypt's Citrus Empire **Chapter 1 title**: The Golden Bounty – Egypt's Flourishing Orange Industry **Story**:

Egypt's orange groves have long been a source of pride and prosperity for the nation, their vibrant hues and tantalizing aromas woven into the fabric of the country's cultural identity. As one of the world's leading producers and exporters of oranges, Egypt's annual harvest is a meticulously orchestrated event, a testament to the ingenuity and hard work of the farmers, distributors, and exporters who make up this vital industry.

From the sun-drenched orchards of the Nile Delta to the bustling export hubs along the Mediterranean coast, the orange industry is the lifeblood of countless communities, providing employment, economic stability, and a sense of purpose to generations of Egyptians. The country's oranges, renowned for their juicy sweetness and distinctive flavor, are in high demand across the globe, gracing the tables of families from Europe to Asia and the Americas.

For the farmers who tend to these orchards, the annual orange harvest is both a challenge and a celebration. With their deep-rooted knowledge of the land and the quirks of the season, they work tirelessly to nurture their crops, overcoming the ever-changing obstacles posed by volatile weather patterns, pests, and fluctuating market demands. It is a delicate balancing act, requiring a keen eye, a steady hand, and an unwavering commitment to quality.

As the harvest season approaches, the once-quiet groves erupt into a hive of activity, with workers carefully plucking the ripe, golden fruit from the branches and loading them onto crates destined for distribution. The air is thick with the heady scent of citrus, mingling with the sound of laughter and the rhythmic hum of machinery. For the farmers, this is the culmination of a year's worth of hard work, a time to reap the rewards of their dedication and celebrate the bounty of the land.

Yet, the journey of the Egyptian orange does not end at the orchard's edge. From here, a complex web of distributors, logistics companies, and export specialists spring into action, ensuring the delicate fruit reaches its destinations across the globe in pristine condition. These unsung heroes of the industry navigate a intricate maze of transportation, storage, and regulatory hurdles, drawing on their wealth of experience and a deep understanding of the market to overcome the challenges that arise.

At the export hubs, government inspectors meticulously examine each shipment, verifying the quality and safety of the oranges before they are carefully packaged and loaded onto ships bound for distant shores. Egyptian exporters, keenly aware of the fierce competition from other citrus-producing nations, constantly seek innovative ways to maintain their edge, investing in cutting-edge technologies and forging strategic partnerships to stay ahead of the curve.

The enduring success of Egypt's orange industry is a testament to the resilience and ingenuity of those who drive this vital sector. From the farmers who nurture the orchards to the logistics experts who ensure the smooth flow of the harvest, each individual plays a crucial role in sustaining this golden bounty. And as the world's appetite for Egypt's oranges continues to grow, the country's growers, distributors, and exporters remain steadfast in their commitment to maintaining the industry's position as a global leader, constantly adapting and innovating to meet the evolving demands of the market.

In the vibrant tapestry of Egypt's agricultural landscape, the orange industry stands as a shining example of the nation's agricultural prowess, its economic might, and the enduring spirit of its people. As the annual harvest unfolds, the golden glow of the ripening fruit serves as a beacon, drawing the world's attention to the remarkable story of Egypt's enduring dedication to cultivating and sharing the fruits of its labors with the global community.

Story by charisma.ai N.B. Generated story will be in active mood after paying for premium account

Web Comic Story Builder

- Title: Citrus harvest in Egypt
- Description: Writing a story about orange fruit harvest in Egypt and the procedures of distribution and exporting
- Typing indicator duration (The time in seconds to display the typing indicator): 1
- Cover Image
- Characters: mood and relationships adjustment (initial mood positive or negative, how slowly or quickly the character goes back to the initial mood, how friendly or unfriendly the initial relationship between the player and the character)
 - The characters built are Farmer and Farmer's wife
 - o These characters are created by the researchers' intuition.
- Story scenes: 5 main scenes are added for trials (Harvesting crops, adding orange fruit in baskets, loading orange baskets in cars, Paying the farmer, Farmer's wife is smiling)
- Subplots: Collecting and singing
- Memories (helps the characters to remember key moments of the story plots)
 - A word the player has said
 - o A sentence the player has said (Arabic song from farmers' culture: يا برتقال اصفر وكبير بكرة الوقفة وبعده العيد)
 - A decision the player has made
 - Something can be either true or false
- Intent (It is used to group phrases into a single intent, so users don't have to repeat the same set of example sentences over and over in player nodes. i.e. the pro story builder)
- Avatar Builder (It is made by Unity open-source programing tool)
 - Includes: Body, skin details and wrinkles, hair, facial hair, eyebrow, eyes, nose, mouth, ear, headgear, footgear, top, pants, gloves, skirts, cape, Main right-hand tools and left-hand tools like farmers' tools.
 - Colors for each category are also included.
- **Pro Story Builder**
 - Same categories above in addition to nodes
 - Character nodes: writing what characters says and an alternative reply.
 - Player nodes: prediction for what the player will say in response to the main story character words
 - \circ Action nodes: predicting what the player will do in response to the main story character action
 - Gate nodes: managing the player pathway through narratives
 - Media nodes: showing images, videos and audio within message bubbles, as though it were sent by the character



Generated story by deepai.org

Title: "Harvesting Orange in Egypt's Nile Delta" Story:

The sun was setting over the vast orange groves of Egypt, casting a warm orange glow over the lush green trees. It was the peak of the harvesting season, and farmers were busy collecting the juicy fruits from the trees. The sweet aroma of freshly picked oranges filled the air, enticing the senses and signaling the start of a busy few weeks.

In the village of Kafr El-Sheikh, a small town in the Nile Delta, Ahmed Hassan was preparing for the harvest. He had inherited his family's orange farm from his father and was determined to make this year's harvest the best one yet. Ahmed had spent months nurturing the trees, pruning them carefully to ensure maximum yield and quality.

As the harvest began, Ahmed's team of workers set to work, carefully plucking the oranges from the trees and placing them into large crates. The crates were then loaded onto trucks and transported to the nearby town of Damietta, where they would be processed and prepared for distribution.

At the Damietta processing plant, Ahmed's oranges were washed, sorted, and graded according to size and quality. The good ones were packed into boxes and shipped to local markets, while the less perfect ones were sent to juice factories or exported to other countries.

Ahmed was proud of his oranges' reputation for being some of the best in Egypt. He took great care to ensure that every fruit was handled with care and precision, from picking to packing. His team worked tirelessly to ensure that every box was filled with perfect, juicy oranges.

As the harvest season progressed, Ahmed's oranges were in high demand. Local markets were flooded with his produce, and his phone rang non-stop with orders from wholesalers and retailers. Ahmed was thrilled to see his hard work paying off.

But Ahmed didn't stop there. He knew that exporting his oranges would be a lucrative way to increase his profits. He had established relationships with buyers from Europe and Asia, who were eager to import his high-quality oranges.

The export process began with careful packing and labeling of the oranges. Ahmed's team worked closely with customs officials to ensure that all necessary documentation was in order. The crates were then loaded onto ships bound for Europe and Asia.

Ahmed's oranges were a hit in foreign markets. They were prized for their sweet flavor and firm texture, making them a popular choice among consumers. Ahmed received rave reviews from his customers, who praised the quality and consistency of his produce.

As the harvest season drew to a close, Ahmed reflected on its success. He had never worked harder or been more proud of his accomplishments. He knew that his hard work would pay off in the long run, as he built a reputation for producing high-quality oranges.

Ahmed's story was not unique in Egypt. Many farmers across the country were working tirelessly to produce some of the world's best fruits. From citrus to dates, Egypt's agricultural sector was a vital part of the country's economy.

As the sun set over Kafr El-Sheikh once again, Ahmed smiled knowing that his oranges would be enjoyed by people all around the world. He had worked hard to build a reputation for producing high-quality fruit, and he was proud of what he had achieved.

The orange fruit harvest in Egypt was not just a source of income for farmers like Ahmed; it was a symbol of hope and resilience in a country that had faced many challenges over the years. The story of Ahmed's oranges was a testament to the power of hard work and dedication in building a better future for himself and his community.

The story of Ahmed's oranges would continue long after the harvest season ended. It would be a reminder of the importance of preserving traditional farming practices and supporting local farmers who worked hard to produce high-quality food for people around the world.

Discussion

Charisma.ai platform offers the users avatar builder option to insert the characters' features, in addition to *visual search* that allows users to choose more relative characters and related contents to be used while generating the story. There are two features in charisma.ai that allows users to create their stories; web comic and pro. The avatar builder is only available in web comic stories and it can be exported to the main library. The nodes; which the dialogue of the characters, is only available in the pro stories. On the other hand, Storynest.ai and Deepai.org are having very easy interface; as soon as the user enters the search input, the story is generated. Here are the generated photos for each AI powered platforms when inserting the same search input:

Storynest.ai	Charisma.ai	Deepai.org
		Photo quality: low
Photo quality: high	Included	Photo size: small
Photo size: big	background is	Photo is slightly relevant
Photo relevance to the topic:	proposed from	
Covered	Internet	

Storynest.ai is easier in the usage than charisma.ai, because less procedures are required before generating the story. Charisma.ai required the user to provide many options before generating the story; characters and details about them, scenes of the story, subplots, memories, intents, categories, media, and finally the avatar builder. Charisma.ai didn't generate the story until all these options are fulfilled.

Story Forge in Storynest.ai is a management tool that organizes the generated story plot, setting, characters, conflict and challenges, resolution of the story problem, lore, locations, and items. When users add any updates to generated story synopsis, outline, or elements, Storynest.ai platform automatically save and influence chapter output and beats. The user can click "Modify" to update these story elements. This shows that a whole book can be written in chapters by using storynest.ai, as it has descriptive novel way of writing.

Stories generated by Storynest.ai are having different features than Deepai.org as follows:

	Storynest.ai	Deepai.org
Sentences long	Long	Short
Grammer mistakes	less	More
Generated locations	Just mentioned Egypt	Mentioned "Kafr El Shiekh" and
	as stated in the search	"Damietta" as Egypt's Nile Delta
	input	cities
Generated names	No characters' name	Main character is called Ahmed
		Hassan
Generated	Descriptive story	Narrative story
storytelling		
Generated plot	Talking about orange	Descripting the story of Ahmed and
	industry in Egypt and	his team who are harvesting,
	ROI	distributing the orange plant inside
		Egypt
Relevance of	Relevant	Not relevant in the part of exporting
generated story to		orange outside Egypt
search input		

As these web-based AI powered platforms is preparing media and storytelling products, an option for inserting this production is available in Charisma.ai and Deepai.org only, which called API Access. It stands for Application Programming Interface which enables programmers or web- players to share their content easily through the web. Here is the generated API for our story.

- Deepai.org (API Access: 6e9f0d9b-ba30-461a-825b-029e98524285)
- Charisma.ai (API Access: af1be827-5597-49ef-bfc1-36e23e89edb3)
- Storynest.ai (Doesn't have API Access feature)

To test the algorithm bias, a number of 20 other users from different computers entered the same title input to validate the results and report about the difference in text and photo generated. The same conclusion is reported for most of them, however, users interested in programing and application development preferred Charisma.ai among the three AI web-based platforms.

Conclusion

The study concluded that Internet algorithms use what users feed the search bar with, and the fact that AI can control the users' preferences is a myth; because simply digital platforms create the content that users request. Media bubbles is an environment in which one's exposure to news, entertainment, or any media produced materials represents the ideological or cultural perspective that excludes or misrepresents other points of view.

19

Yet, because of journalists lack of experience, concern for their jobs, and worry that technology would undermine journalism, media professionals mistrust it. Under human supervision, even the most sophisticated AI technologies will have a supporting function. Education and training are essential for fostering critical thinking skills and overcoming anxiety.

Regarding the group trials; most users found charisma.ai is more time consuming and need time, as it doesn't help quickly and it requires the user to provide all the story details to be able to generate the prompt. Accordingly, this option can be more beneficial for algorithm bias as it let the user put their preferred items then the AI web-based platform generates the story. Also, algorithm bias is less shown in charisma.ai because it doesn't depend on tracking like deepai.org.

The AI writing assistant and character chats in storynest.ai use Story Forge for consistency. But Charisma.ai is considered design tool and storytelling conversational writing AI chat.

Deepai.org is considered as most simple and AI media generator, hence it gives glossary for the most famous terminologies of AI like Active learning, Generative Adversarial Network, Machine learning models and their evaluation metrics, Convolutional Neural Network, Attention models, Bayes Theorem, Posterior probability, Deep Belief Network, Natural language processing, and supervised learning techniques like Batch Normalization.

Recommendation

This openness to AI powered web-based platforms and the acknowledgment of the way they work can lessen the possibility of bias or manipulations and help users understand how their news feeds are created. Platforms should actively encourage multiple opinions by making sure that material from different sources and points of view is given equal exposure.

Although it is not always possible, supervision is a priority because of the enormous number of outputs produced by AI. Since experts in the fields of programming, information technology, journalism, and editing are engaged in the development, application, and final use of this technology, transparency and accountability present additional difficulties.

The position of human journalists as essential professionals and agents who have to oversee AI outputs will have an impact on journalism in the future. Instead rendering journalists obsolete, AI will enable them to take on new tasks and develop their skills. But human journalists also have sentiments, empathy, sarcasm, irony, and humor. In certain situations, AI can make human labor more productive, but in most cases, AI cannot solve all problems on its own.

It is imperative that universities include AI training for journalists in order to attain a holistic view to technological advancements and dispel myths around the deployment of AI. On how to impart to journalists the abilities they need to carry out particular responsibilities effectively in the setting of limitless AI technologies, there is disagreement, still.

Algorithm curation and using AI technologies in media production inherently raises ethical issues; thus, journalists need to control the algorithm, comprehend how it operates, and monitor its behavior. Although AI can guarantee morality and excellence, the amount of data it processes and the results it produces in some domains can restrict the extent of oversight. Still, it could be possible to oversee certain documentation-related duties, such news authoring or content checking.

Regarding the AI web-based platforms; using professional applications can reduce the algorithm bias and generate unique prompts for the users when users use Charisma.ai and similar ones like <u>www.character.ai</u> and <u>www.studio.inworld.ai</u> Most of the tracking Ai web-based applications offers the Chat-bots at website homepage to gather information about the user preferences. So, it is recommended to pay attention for the information offered before creating your story to avoid algorithm bias.

Future Studies

- In addition to group trials methodology for the AI web-based platform, survey sheet can be created and analyzed for hybrid qualitative and quantitative research.
- Political and social generated stories are more appealing; while studying algorithm bias.
- Different computer servers can be an add on while applying the group trials methodology to study the tracking option.
- Making future study about algorithm bias in a group trial experiment.
 Variables could be starting chat with the application and then create the avatar.

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24

Journal of Media and Interdisciplinary Studies – Issue 8 – June 2024

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