How AI have influence in our daily lives?

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ABSTRACT

Just as smartphones and the Internet have greatly changed our daily lives, artificial intelligence (AI) applications are also beginning to have a major impact on our daily lives. His two main products in this relatively new trend are virtual assistants and home robots. They have similar functional characteristics. Both interact with users through conversational agents and attempt to mimic human behaviour. Home robots host virtual assistants and also have mechanical capabilities. There is much debate about the risks, challenges, and future visions associated with the proliferation of AI on an industrial scale. However, these arguments have not yet extended to the user level in the context of everyday life. This article provides an overview to discuss the benefits, risks, challenges, open issues, and future vision of using virtual assistants and social he robots in everyday life. In this research we also look at how much people are influenced to use AI technologies in their everyday life knowingly or unknowingly, and what difficulties they face, what future equations expect. We will cover all the points regarding the importance of technological evolution in daily life. and try to cover some solution to open issues

Keywords:

Artificial intelligence, Voice assistant, voice recognition, facial recognition, security purpose, API – Application Program Interface,

Introduction

What is AI?

Artificial intelligence (AI) most often appears in popular culture as a group of intelligent robots trying to destroy humanity, or at least as a marvellous theme park. Artificial intelligence machines in general don't exist yet and won't be soon, so we're safe for now. This article details the risks and benefits of artificial intelligence. Artificial intelligence is an simulation of human intelligence processes by machines, especially computer systems. Specific applications in AI include expert systems, natural language processing, speech recognition, and computer vision.

We are far from living in the Westworld, but that doesn't mean AI's impact on our future will be trivial. According to a recent poll, more than 72% of Americans are concerned that machines will do many of the jobs of humans in the future. Additionally, tech entrepreneur Elon Musk, who has long advocated government regulation of AI, recently compared the dangers of AI to nuclear weapons. Not surprisingly given the impact of artificial intelligence in Industry 4.0 we are not there yet. If you want, you can check out Artificial Intelligence Trends for 2022.

History of AI

A brief history of artificial intelligence Here's a quick timeline of how AI has evolved over the past 60 years since its birth. 1956 - John McCarthy coined the term "artificial intelligence" and hosted the first AI conference. 1969 - Shakey is the first general purpose mobile robot. He can now do things with a purpose rather than just a list of instructions.1997 - Developed the supercomputer "Deep Blue" and defeated the world chess champion. Creating this great computer was a big milestone for IBM.2002 - The first commercially successful robotic vacuum cleaner is developed.2005-2019- Today comes speech recognition, robotic process automation (RPA), dancing robots, smart his home and other innovations. 2020-Baidu releases his Linear Fold AI algorithm for medical and scientific and medical teams developing vaccines in the early stages of the SARS-CoV-2 (COVID-19) pandemic. The algorithm can predict the viral RNA sequence in just 27 seconds. This is an 120 times faster than other methods.

How does AI work?

As the hype around AI accelerates, vendors are scrambling to encourage the use of AI in their products and services. Often what they call his AI is just a component of AI such as machine learning. AI requires a dedicated hardware and software foundation to write and train machine learning algorithms. No programming language is synonymous with AI, but several languages such as Python, R, and Java are popular. In general, AI systems work by taking large amounts of labelled training data, analysing the data for correlations and patterns, and using those patterns to predict future states. In this way, chatbots fed with text chat examples can learn to create realistic interactions with humans, and image recognition tools can go through millions of examples to identify objects in images. and learn to explain. AI programming focuses on his three cognitive skills: Learn, reason, self-correct. learning process. This aspect of AI programming focuses on collecting data and creating rules on how to transform that data into actionable information. Rules, called algorithms, give computing devices step-by-step instructions on how to perform a particular task.

AI combines large amounts of data with fast, iterative processing and intelligent algorithms that enable software to automatically learn from patterns and features in the data. AI is a broad research field, covering many theories, methods, techniques, and the following major subfields:

Machine learning automates analytical modelling. Use neural networks, statistics, operations research, and physics techniques to find hidden insights in your data without explicitly programming where to look and draw conclusions.

A neural network is a type of machine learning made up of interconnected units (such as neurons) that respond to external inputs and process information by passing information between each unit. This process requires multiple iterations of the data to find connections and derive meaning from undefined data.

Deep Learning uses huge neural networks with many layers of processing units, leveraging advanced computational power and improved training techniques to learn complex patterns from large amounts of data. A common application is image and speech recognition.

Computer Vision uses pattern recognition and deep learning to recognize the content of images and videos. If machines can process, analyse and understand images, they can take pictures and videos in real time and interpret their surroundings.

Natural Language Processing (NLP) is the ability of computers to analyse, understand, and generate human language, including speech. The next level of NLP is natural language interaction. It allows humans to use normal everyday language to communicate with computers and perform tasks.

In addition, several technologies are enabling and supporting AI. Training neural networks requires big data and computational power.

The Internet of Things generates vast amounts of data from connected devices, much of it unanalysed. By automating models with AI, more models become available.

advanced algorithms have been developed and combined in new ways to analyse more data at multiple levels faster. This intelligent processing

is key to identifying and predicting rare events, understanding complex systems, and optimizing for unique scenarios. The

API (Application Programming Interface) is a portable code package that enables the addition of AI capabilities to existing products and software packages. Add image recognition and Q&A capabilities to your home security system to describe your data, create captions and headlines, and highlight interesting patterns and insights in your data.

In summary, the goal of AI is to provide software that can justify inputs and explain outputs. AI enables human-like interactions with software and provides decision-making support for certain tasks, but it will not replace humans and neither will it in the near future.

What are types of AI uses in daily life?

Types of AI Use

There are two types of AI applications to improve people's daily lives.

SOFTWARE/METHOD:

Voice assistants, image recognition for facial recognition in mobile phones, and ML-based financial fraud detection are examples of AI software currently used in everyday life. Usually, you just download the AI software from the online store, no other device is needed.

EMBODIED

Drones, self-driving cars, assembly line robots, and the Internet of Things (IoT) are examples of AI implemented in hardware. This includes the development of certain devices with AI capabilities.

We need AI in our lives. B. Call centre with artificial intelligence or games with artificial intelligence. So let's dig deeper into how artificial intelligence is being used in our daily lives.

Examples of how AI can improve our daily lives

AI and ML driven software and devices mimic human thought processes to help society drive the digital revolution. AI systems perceive their surroundings, process what they see, solve problems, take action to help with household chores, and make everyday life more enjoyable.

How will artificial intelligence improve social media?

people regularly check their social media accounts, including Facebook, Twitter, Instagram and other platforms. AI not only customizes the feed behind the scenes, but also detects and eliminates false positives.

TWITTER

Twitter relies on artificial intelligence behind the scenes to improve our products, from suggesting Tweets to addressing offensive or racist content to improving the user experience. It uses advanced neural networks that process large amounts of data to learn customer preferences in time.

FACEBOOK

Deep learning is helping Facebook extract value from an unstructured dataset gathered from nearly 2 billion users who update his status 293,000 times a minute. Most of Facebook's deep learning technology is based on the Torch framework, which focuses on deep learning and neural networks.

INSTAGRAM

Instagram is also using big data and artificial intelligence to target ads, fight cyberbullying and remove offensive comments. As the number of posts on the platform increases, artificial intelligence becomes more important to surface information that people may be interested in, remove spam, and improve user experience.

Chatbots

Chatbots are AI programs that can answer questions and provide consumers with relevant content, including frequently asked questions. Chatbots are so successful that they sometimes appear to be interacting with real humans.

Autonomous Vehicles and Aircraft

Drones or Unmanned Aerial Vehicles (UAVs) are already in our skies, conducting surveillance and delivering delivery services on various schedules, such as delivering medicines and essentials to the elderly at home. COVID-19 is restricting their movement.

Although the market for self-driving cars is still in its early stages, there are enough prototypes and pilot projects to show that self-driving cars will

become more common as artificial intelligence and his IoT (Internet of Things) technology improve. already exists. Artificial intelligence in everyday life is evolving day by day.

DIGITAL ASSISTANT

Virtual assistants like Siri, Cortana and Google Assistant have made our lives easier. You acted like a great friend, reminding you to pick up your package, telling you jokes. The software recognizes speech patterns and provides natural language processing capabilities. It may also learn about you by monitoring work hours, screen time, and other related data. The use of artificial intelligence allows you to practice learning and listening like a human being.

Food Ordering Sites

When it's time to eat, online ordering applications and sites often send you attractive notifications about breakfast, lunch, and dinner. This is made possible by artificial intelligence software that tracks when you are most likely to want to eat.

Music and Media Streaming Services

Another great example of AI is the music and video streaming services we use every day. AI determines usage of Spotify, Netflix and YouTube. These platforms offer suggestions based on your preferences.

Next time you want to watch recommended videos on YouTube or watch recommended shows on Netflix and other media, remember that AI is involved.

PLAGIAT j

A college student's (or professor's) nightmare. Whether you're a content manager or a teacher grading essay, you've probably faced the same problem:

The Internet has made plagiarism more convenient.

The knowledge and data available to malicious students and staff is almost limitless. To be honest, there is not a single human being on the planet who can compare and contrast anyone's essay with all the available data. AI is a completely different species. AI can analyse vast amounts of data and

compare it with relevant text to see if there is a match.

Additionally, advances and developments in this area have enabled certain tools to verify sources in other languages, not just images and sounds.

BANKING

Many major banks now let you cash checks using your smartphone. With just a few taps, you can deposit checks without going to the bank. Aside from the obvious precaution of using your mobile phone to access your bank account, checks also require a signature.

Banks now use artificial intelligence (AI) and machine learning software to read handwritten signatures, compare them to signatures previously given to banks, and approve checks without risk.

In general, machine learning and AI technologies allow computers to perform many tasks faster. As a result, work processes are completed more efficiently, waiting times are reduced, and costs are reduced. Artificial intelligence in everyday life is evolving day by day.

Credit and Fraud

After talking about banking, let's talk briefly about fraud. Every day, the banks process millions of transactions. All this is difficult for ordinary people to track and analyse.

Artificial Intelligence in Everyday Life:

Banking

Moreover, the incidence of fraudulent transactions is changing daily. With AI and machine learning algorithms, it can process thousands of transactions per second. Additionally, it can be trained to recognize what problematic activities look like and prepare for future problems.

When you finally apply for a loan or get a credit card, your bank needs to review your application. The software can now handle a multitude of factors such as: Your credit score, financial history and more. This means less waiting time for approvals and less room for error.

Online Retail (E-Commerce) and Shopping

Consumers' online shopping experience is becoming more personalized and streamlined thanks to artificial intelligence (AI) technologies such as machine learning.

AI-powered automated warehouse and supply chain management systems help retailers better manage their logistics. At the same time, sentiment analysis allows us to better understand and respond to consumer needs and behaviours.

Navigation and Travel

The work of the AI engineers behind navigation apps like Google Maps and Waze never ends. Only satellite images that update every second can be effectively cross-checked by unleashed ML algorithms.

 MIT researchers recently developed a navigation method that digitally marks road features on his map in real time. At the same time, these digital maps are also based on satellite imagery and integrate cycle path and parking space information.

Convolutional Neural Networks (CNNs) and Graph Neural Networks (GNNs) have helped reduce repeated route changes. AI can also use predictive models to help determine routes in satellite imagery overgrown with vegetation.

TRANSPORT

Car rental companies such as Uber and Lyft are very convenient as they can almost always provide a car if you need it. But we underestimate the AI-based programs that operate them. Before I get home from work, I often get a notification to call a taxi. How do these applications know when they need a taxi? These apps use deep learning technology and already identify our everyday behaviours, so they do this can do. Artificial intelligence in everyday life is evolving day by day.

Security and Surveillance

Every country has its own rules, but it is debatable whether it is considered a good idea to have a large-scale surveillance system. While we may all disagree on the ethics of using such a system, there is no doubt that it is being used and AI plays a key role in it. .

Humans cannot watch many monitors at the same time, so an AI that allows machines to watch makes perfect sense. Thanks to technological advances like object recognition and facial recognition, it's not far until all his security cameras and his feeds are monitored by AI rather than humans.

SMART HOME

When you think of AI to create a smart home, you think of Alexa and Bixby. But these AI applications aren't limited to smart voice assistants like Alexa and Bixby.

AI is also being used to make homes smarter in many ways, such as smart thermostat devices that use AI to automatically adjust the temperature. These AI applications save energy by automatically turning lights on and off based on human presence, smart speakers, apps that adjust light colour based on time of day, and more. Artificial intelligence in everyday life is evolving day by day.

GOOGLE PREDICTIVE SEARCH ALGORITHM

When you try to look something up on Google, you'll see some pre-populated search terms in the search bar. This is Google's autocomplete feature, which provides predictions as you type each letter of your search query. Rank Brain is an artificial intelligence algorithm used in Google's predictive search. Its job is to retrieve results based on the data provided in the query. Improve search results on every search and provide more relevant results for users. Google uses a variety of technologies in its search engine, including neural networks, deep learning, machine learning and artificial intelligence. Google's search algorithm is so effective that it has become a must-have.

Internet of Things

The convergence of AI and the Internet of Things (IoT) presents a wealth of opportunities to create smarter home technologies that require less human intervention to function. AI components, on the other hand, help these gadgets learn from data.

Create, Communicate, Aggregate, Analyse, and Act are the five main phases of IoT enablement. The effectiveness of the "act" step depends on how thorough the analysis was done. AI adds a lot of value to this process. The value of data collected by IoT devices is unlocked by the adaptability of IoT. Insights gleaned from this information over time will help IoT technologies respond more effectively to human signals and needs.

SMART HOME

Think of Alexa and Bixby when it comes to creating a smart home with AI. But these AI applications aren't limited to smart voice assistants like Alexa and Bixby. AI is also being used to make homes smarter in many ways, such as smart thermostat devices that use AI to automatically adjust the temperature. These AI applications save energy by automatically turning lights on and off based on human presence, smart speakers, apps that adjust light colour based on time of day, and more.

LITREATURE SURVEY:

Advanced smart device with voice control. They are always connected to the Internet and provide information interactively. The electronic services provided are based on the actions of devices interconnected via wireless communication channels. This can be a smart plug, smart light bulb, or any electronic device compatible with a smart audio system. Remote control over the Internet of these network devices is possible. The benefits of these technologies certainly apply to a wide variety of monitoring and services. The system proposed in this paper can monitor predefined operations with online remote control. Intervene through local strategies to ensure predictable functionality, especially in offline situations. This includes emergencies where electricity consumers are connected and emergencies where urgent assistance is required for certain long-distance services.

Amazon offers a cloud-based developer console for creating and deploying custom skills that integrate with the Alexa Voice Service device SDK running on host hardware. When this provided custom skill is invoked with a specific language request, the host hardware performs the requested task and returns the response. Currently, developers are implementing AI algorithms as part of custom features on existing Alexa devices, and current Alexa devices are not camera-enabled, making voice-based applications rather than real-time image and video-based applications. is focused on the application of Therefore, we need to develop an advanced camera-enabled Alexa smart speaker platform and make it available to the open-source community to facilitate the implementation of image/video-based AI algorithms as part of custom functionality. This article describes the design and development of a state-of-the-art camera-enabled Linux-based Alexa smart speaker prototype. A microphone array with an advanced on-chip DSP is connected to the prototype to deliver voice data processed by speech algorithms to the Alexa Voice Service, enabling seamless full-duplex interactions between users and Alexa. Finally, key custom skills based on deep learning and computer vision are realized and tested on the developed prototype.

Voice-enabled interactive computing has exploded in popularity with the recent release of Alexa Voice Services and Google Home. Speech-interactive applications include multiple components, including complex speech recognition and translation algorithms, natural language understanding and generation capabilities, and custom computational capabilities (commonly called features). A voice-driven interactive system consists of a software pipeline that uses these components. These pipelines are typically resource intensive and need to run quickly to maintain consistent latency for dialogs. As a result, voice interaction pipelines are typically computed entirely in the cloud. However, cloud connectivity may not be practical in many cases, requiring these voice-interactive pipelines to run at the edge. This whitepaper evaluates the impact of pushing a voice-driven pipeline to compute-light edge devices. Our primary motivation is to enable voice-enabled interfaces for first responders in emergencies such as building fires where connectivity to the cloud is impractical. We first characterize the end-to-end performance of a fully open-source voice interaction pipeline for four different configurations, from fully cloud-based to fully edge-based. We also identify potential optimization opportunities to run the voice-controlled interaction pipeline entirely on low-computing edge devices, resulting in lower

response latency than high-performance cloud services.

Today, voice assistants make everyday life easier and save time. However, although voice assistants are easy to use, many people cannot use them even if they want to. The main reason for this problem is the language barrier. Indian city dwellers use voice assistants on a daily basis. But people living in rural areas aren't even fluent in English to start a conversation with a voice assistant. Therefore, in this paper, we propose a unique system based on improvement initiatives.

RESEARCH METHODOLOGY

5. Research Methodology:

This study consists of descriptive and analytical components. Therefore, this is a hybrid research methodology. The poll was a public poll with no specific criteria as the requirement. Google Forms were used as the platform for conducting the survey. participants had 5 minutes to complete the questionnaire. This Survey consisted of 6 multiple-choice questions, 1 His checkbox question, and 2 linear scale/rating questions. Data were then downloaded in the form of an Excel spreadsheet. 7 Descriptive analysis was performed in MS Excel. As a result, a set of statistical results was collected. These results included mean, median, mode, kurtosis, skewness, and much more.
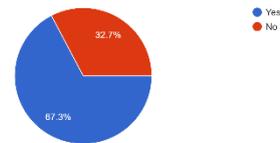
6. Public Survey

We did public survey and collected information so below are some public opinions.
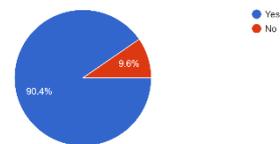
Results

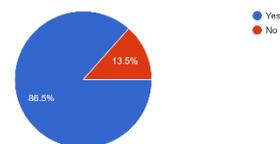Are you aware of AI technology?
52 responses
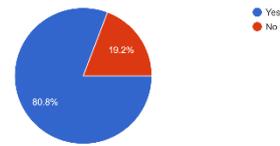
Have you experience with marketing chatbot with voice interaction which is also an AI feature?
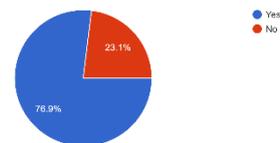52 responses

Do you know social media application like(Facebook, Instagram) also have AI algorithim?
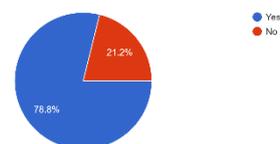52 responses

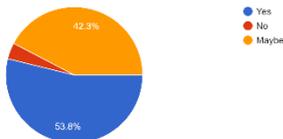Do you use devices which have virtual asistant ?
52 responses

Do you use application which detects scam calls ?
52 responses

Do you frequently use autocorrect, face recognition , spam filter,google predective ?
52 responses

Do you feel AI is helpful for you in daily life?
52 responses

- Yes
- No
- Maybe

42.3%
53.8%

7 Descriptive Analysis:

Descriptive statistics is a means of describing features of a dataset by generating summaries about data samples.

Are you aware of AI tech0logy?	
Mean	0.807692
Standard Error	0.055187
Median	1
Mode	1
Standard Deviation	0.397959
Sample Variance	0.158371
Kurtosis	0.608233
Skewness	-1.60821
Range	1
Minimum	0
Maximum	1
Sum	42
Count	52

Do you k0w social media application like (Facebook, Instagram) also have AI algorithm?	
Mean	0.903846
Standard Error	0.041281
Median	1
Mode	1
Standard Deviation	0.297678
Sample Variance	0.088612
Kurtosis	6.199899
Skewness	-2.82184
Range	1
Minimum	0
Maximum	1
Sum	47
Count	52

Do you use devices which have virtual assistant?	
Mean	0.865385
Standard Error	0.047793
Median	1
Mode	1
Standard Deviation	0.344642
Sample Variance	0.118778
Kurtosis	2.975876
Skewness	-2.20519
Range	1
Minimum	0
Maximum	1
Sum	45
Count	52

Have you experience with marketing chatbot with voice interaction which is also an AI feature?	
Mean	0.673077
Standard Error	0.065686
Median	1
Mode	1
Standard Deviation	0.473665
Sample Variance	0.224359
Kurtosis	-1.48086
Skewness	-0.76003
Range	1
Minimum	0
Maximum	1
Sum	35
Count	52

Do you use application which detects scam calls?	
Mean	0.769231
Standard Error	0.058997
Median	1
Mode	1
Standard Deviation	0.425436
Sample Variance	0.180995
Kurtosis	-0.27963
Skewness	-1.3163
Range	1
Minimum	0
Maximum	1
Sum	40
Count	52

Do you frequently use autocorrect, face recognition, spam filter, google predictive?	
Mean	0.788462
Standard Error	0.057187
Median	1
Mode	1
Standard Deviation	0.412384
Sample Variance	0.17006
Kurtosis	0.120005
Skewness	-1.45496
Range	1
Minimum	0
Maximum	1
Sum	41
Count	52

Do you feel AI is helpful for you in daily life?	
Mean	1.384615
Standard Error	0.078417
Median	1
Mode	1
Standard Deviation	0.565472
Sample Variance	0.319759
Kurtosis	-0.78631
Skewness	-0.2002
Range	2
Minimum	0
Maximum	2
Sum	72
Count	52

Conclusion

Artificial intelligence is evolving thanks to the continuous increase in data available to machine learning algorithms. This allows artificial intelligence to work more effectively. A trained ML model can be shaped to work better with a wide range of your real-world data. Below are some of the most prominent examples of AI that are widely used and easy to use in everyday life. This proves that AI is already transforming our lives, allowing us to be more productive while focusing on real problems.

There is more in future now. In the future, AI technology will accelerate, become more pervasive, and become more important to all industries and nearly every aspect of our daily lives.

References:

https://egfound.org/projects/digital-revolution-technology-power-you/?gclid=CjwKCAiAv9ucBhBXEiwA6N8nYDR3G0VNtyVHJ4YeIHW15YEQicwoyTGhXXo0hdMFjewirpslck1UKxoCw6YQAvD_BwE

https://www.cigionline.org/articles/cyber-security-battlefield/?utm_source=google_ads&utm_medium=grant&gclid=CjwKCAiAv9ucBhBXEiwA6N8nYBIigYD6A5trv12d2Zp2VdHPzPqhZd-DkmXqKXAvSm0W_TPQ-hAS8RoC92sQAvD_BwE

https://www.scaleai.ca/about-us/publications/?gclid=CjwKCAiAv9ucBhBXEiwA6N8nYOfUMWO8CWpFcXZThMZ60wrurHluX4ZpBq4VJKq697H16PwzM97jCRoCYdcQAvD_BwE

https://www.fita.in/the-importance-of-artificial-intelligence-in-everyday-life/