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Four Years of Technology Advancements

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The 100 years of tech revolution infographic shows the huge number of technological advancements, ranging all the way from the radio in 1920 to neural interfacing developments with the Neuralink in 2020. However, there have been many technological advancements in these past 3 years, especially within the realms of artificial intelligence and spatial computing. Some of these advancements include the release ChatGPT, DALL-E, Google Bard, Bing Chat, Ray-Ban Meta Glasses, Apple Vision Pro and the first human to have Neuralink implanted.

As mentioned before, the 100 years of tech revolution infographic ends with the neural interfacing developments in 2020; however, there are other important technological releases on 2020 such as the OpenAI API and GPT-3. The OpenAI API is an API used to access the artificial intelligence models developed by OpenAI. This API can be integrated into a product to provide a general-purpose “text in, text out” interface, and develop an entirely new application with AI [1]. The API would use the GPT-3 AI model developed by OpenAI, which is a machine learning model trained on text-based internet data [2]. The release of the GPT-3 model and OpenAI API was crucial for the development of applications with AI and to make artificial intelligence more available to the public. DALL-E was released in 2021 and is a perfect example of how GPT-3 could be used. DALL-E is a version of GPT-3 trained to generate images from text descriptions [3]. In 2022, OpenAI released ChatGPT, a language learning model based on the GPT architecture and designed to give human-like responses to input prompts. ChatGPT exploded in popularity upon release, reaching a million users in just five days, and currently has more than 180 million users [4]. After ChatGPT’s success, at the beginning of 2023 Microsoft released their own chatbot, Bing Chat, now known as Microsoft Copilot. This chatbot uses the GPT-4 model, OpenAI’s latest model, which was also released in 2023. Soon after the release of Bing Chat, Google released their own chat bot, Google Bard, which is based on their own language learning model. Another significant advancement when it comes to AI implementations are the Ray-Ban Meta Glasses. These are smart glasses that have an integrated chatbot, speakers, and a camera.

Besides language learning models and chatbot implementations, there have also been significant technological advancements in the spatial computing field. The Meta Quest 3 is a virtual reality headset with augmented reality capabilities released in the last quarter of 2023. This technology is called mixed reality, and with it you can see and interact with both the physical world around you and virtual objects and characters that are overlaid on top of it [5]. Much like the Meta Quest 3 headset, Apple released their own spatial computer called the Apple Vision Pro. As described by Apple, Vision Pro is a revolutionary spatial computer that seamlessly blends digital content with the physical world, while allowing users to stay present and connected to others [6]. One of the biggest things that separates the two headsets is that Apple Vision Pro has no controllers. Instead, it uses the user’s hands, fingers, and eyes to interact with everything.

Finally, probably the most recent technological advancement was completed in the past few days in 2024, the first successful implementation of Neuralink’s Brain Computer Interface. Since this advancement has been so recent, the patient is still in recovery and there aren’t any results to mention. However, Elon Musk, Neuralink’s founder, has said that the patient’s initial results show promising neuron spike detection.

In summary, there have been numerous technological advancements after the last developments noted in the 100 years of tech revolution infographic. These advancements were mainly seen in the artificial intelligence field with the release of multiple language learning models and chatbots, the spatial computing field with the release of the Meta Quest 3 and Apple Vision Pro headsets, and the neural interfacing field with Neuralink's first successful Brain Computer Interface on a human. As technological advancements continue to accelerate, more and more technologies will be developed. With that being said, the future of tech is looking bright and with so much happening in the past three years, the infographic for the next 100 years of tech revolution will have a lot more technological advancements than the previous one.

References

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