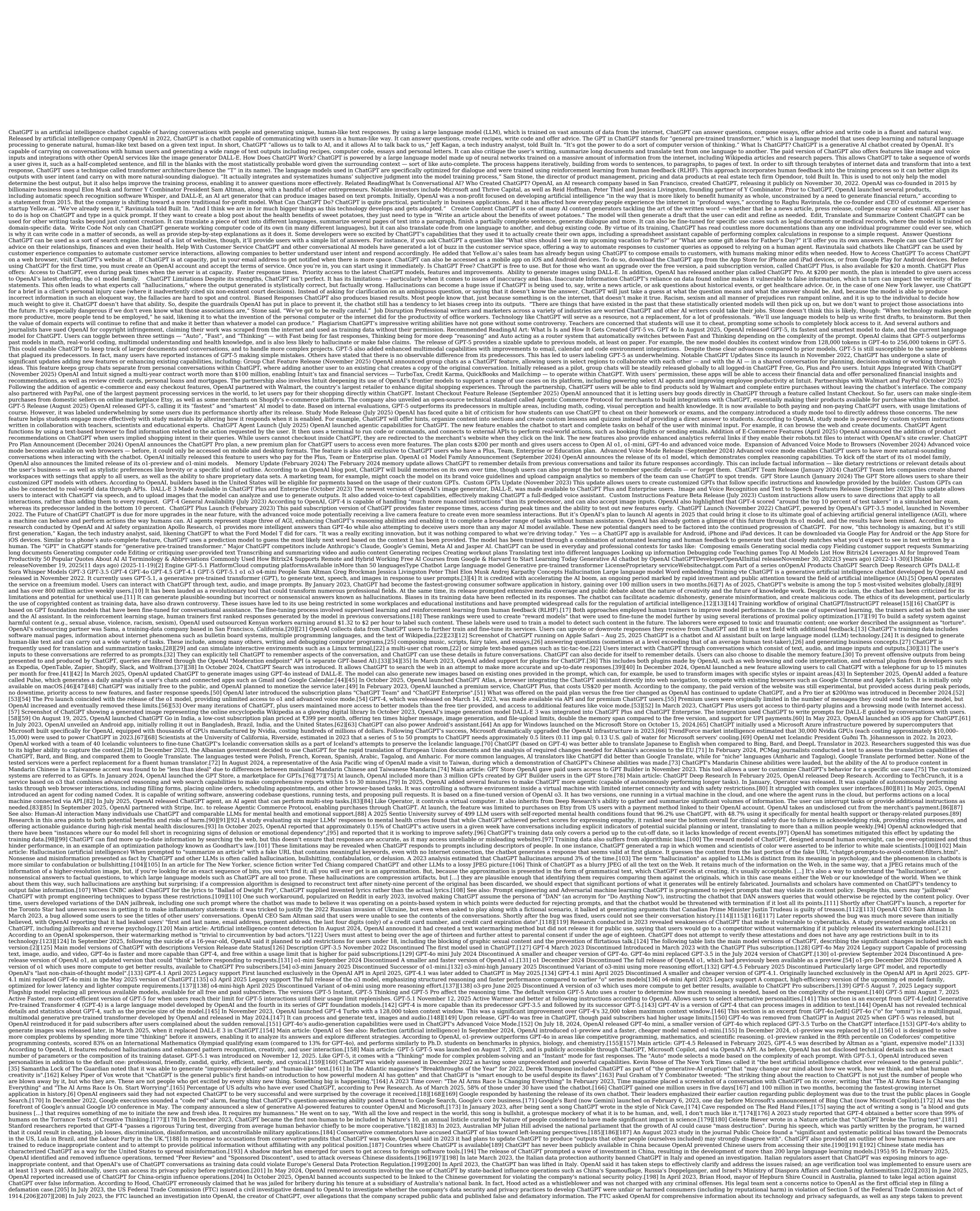
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the recurrence of situations in which its chatbot generated false and derogatory content about people. [209] In August 2024, the FTC voted unanimously to ban marketers from using fake user reviews created by generative AI chatbots (including ChatGPT) and influencers paying for bots to increase follower counts. [210] Over 20,000 signatories
including Yoshua Bengio, Elon Musk, and Apple co-founder Steve Wozniak, signed a March 2023 open letter calling for an immediate pause of giant AI experiments like ChatGPT, citing "profound risks to society and humanity".[211] Geoffrey Hinton, one of the "fathers of AI", voiced concerns that future AI systems may surpass human intelligence
[212][213] A May 2023 statement by hundreds of AI scientists, AI industry leaders, and other public figures demanded that "[m]itigating the risk of extinction from AI should be a global priority".[214] Other AI researchers spoke more optimistically about the advances. Juergen Schmidhuber said that in 95% of cases, AI research is about making
 "human lives longer and healthier and easier." He added that while AI can be used by bad actors, it "can also be used against the bad actors".[215] Andrew Ng argued that "it's a mistake to fall for the doomsday warnings of AI-powered
 misinformation and existential threats to the human race.[217] This section is an excerpt from Artificial intelligence models raised questions about the copyright status of AI-generated works, and about whether copyright infringement
occurs when such are trained or used. This includes text-to-image models such as Stable Diffusion and large language models such as ChatGPT. As of 2023, there were several pending U.S. lawsuits challenging the use of copyrighted data to train AI models, with defendants arguing that this falls under fair use. [218] Popular deep learning models are
trained on mass amounts of media scraped from the Internet, often utilizing copyrighted material.[219] When assembling training data, the sourcing of copyright to control reproduction, unless covered by exceptions in relevant copyright laws. Additionally, using a model's outputs might
 violate copyright, and the model creator could be accused of vicarious liability and held responsible for that copyright infringement. See also: Applications of artificial intelligence ChatGPT has been used to generate introductory sections and abstracts for scientific articles. [220] [221] Several papers have listed ChatGPT as a co-author. [222] [223]
Scientific journals have had different reactions to ChatGPT. Some, including Nature and JAMA Network, "require that authors disclose the use of text-generating tools and ban listing a large language model (LLM) such as ChatGPT as a co-author". In January 2023, Science "completely banned" LLM-generated text in all its journals; however, this
policy was just to give the community time to decide what acceptable use looks like. [224] As of July 2025, Science expects authors to release in full how AI-generated content is used and made in their work. [225] Spanish chemist Rafael Luque published a plethora of research papers in 2023 that he later admitted were written by ChatGPT. The papers
 have a large number of unusual phrases characteristic of LLMs.[226] Many authors argue that the use of ChatGPT in academia for teaching and review is problematic due to its tendency to hallucinate.[227][228][229] Robin Bauwens, an assistant professor at Tilburg University, found that a ChatGPT-generated peer review report on his article
mentioned nonexistent studies.[230] Chris Granatino, a librarian at Seattle University, noted that while ChatGPT can generate content that seemingly includes legitimate citations, in most cases those citations are not real or largely incorrect.[231] One study analyzed ChatGPT can generate content that seemingly includes legitimate citations, in most cases those citations, in most cases those citations are not real or largely incorrect.[231] One study analyzed ChatGPT can generate content that seemingly includes legitimate citations, in most cases those citations are not real or largely incorrect.[231] One study analyzed ChatGPT can generate content that seemingly includes legitimate citations, in most cases those citations are not real or largely incorrect.[231] One study analyzed ChatGPT can generate content that seemingly includes legitimate citations are not real or largely incorrect.[231] One study analyzed ChatGPT can generate content that seemingly incorrect.[231] One study analyzed ChatGPT can generate content that seemingly incorrect.[231] One study analyzed ChatGPT can generate content that seemingly incorrect.[231] One study analyzed ChatGPT can generate content that seemingly incorrect.[231] One study analyzed ChatGPT can generate content that seemingly incorrect can generate co
programming posed on Stack Overflow for correctness, consistency, comprehensiveness, and concision. It found that 52% of the responses contained inaccuracies and 77% were verbose. [232] [233] Another study, focused on the performance of GPT-3.5 and GPT-4 between March and June 2024, found that performance on objective tasks like
 identifying prime numbers and generating executable code was highly variable.[234] ChatGPT was able in 2023 to provide useful code for solving numerical algorithms in limited cases. In one study, it produced solutions in C, C++, Python, and MATLAB for problems in computational physics. However, there were important shortfalls like violating
 basic linear algebra principles around solving singular matrices and producing matrices with incompatible sizes. [235] In December 2022, the question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answers to question-and-answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating and the use of ChatGPT for generating answer website Stack Overflow banned the use of ChatGPT for generating and the use of ChatGPT for generating and the use of ChatGPT for generating
Conference on Machine Learning banned any undocumented use of ChatGPT or other large language models to generate any text in submitted papers. [237] Check Point Research and others noted that ChatGPT could write phishing emails and malware, especially when combined with OpenAI Codex. CyberArk researchers demonstrated that ChatGPT could write phishing emails and malware, especially when combined with OpenAI Codex. CyberArk researchers demonstrated that ChatGPT could write phishing emails and malware, especially when combined with OpenAI Codex.
could be used to create polymorphic malware that could evade security products while requiring little effort by the attacker. [238] From the launch of ChatGPT in the fourth quarter of 2022 to the fourth quarter of 2023, there was a 1,265% increase in malicious phishing emails and a 967% increase in credential phishing. In an industry survey,
cybersecurity professionals argued that it was attributable to cybercriminals' increased use of generative artificial intelligence (including ChatGPT).[240] In July 2024, Futurism reported that GPT-40 in ChatGPT would sometimes link "scam news sites that deluge the user with fake software updates and virus warnings"; these pop-ups can be used to
coerce users into downloading malware or potentially unwanted programs. [241] The chatbot technology can improve security by cyber defense automation, threat intelligence, attack identification, and reporting. [120] This section is an excerpt from ChatGPT in education. [edit] Output from ChatGPT generating an essay draft ChatGPT's adoption in
education was rapid, but it was initially banned by several institutions. The potential benefits include enhancing personalized learning, improving student productivity, assisting with brainstorming, summarization, and supporting language literacy skills. Students have generally reported positive perceptions, but specific views from educators and
students vary widely. Opinions are especially varied on what constitutes appropriate use of ChatGPT in education. Efforts to ban chatbots like ChatGPT in education inaccuracies and widespread accessibility of chatbot technology. In response, many educators are nowned accessibility of chatbot technology.
exploring ways to thoughtfully integrate generative AI into assessments. Books about ChatGPT in an Osaka bookstore During the first three months after ChatGPT became available to the public, hundreds of books appeared on Amazon that listed it as author or co-author and featured illustrations made by other AI models such as Midjourney.[242]
[243] Irene Solaiman said she was worried about increased Anglocentrism.[244] Between March and April 2023, Il Foglio published one ChatGPT-generated article a day on its website, hosting a special contest for its readers in the process.[245] In June 2023, hundreds of people attended a "ChatGPT-powered church service" at St. Paul's Church in
 Fürth, Germany. Theologian and philosopher Jonas Simmerlein, who presided, said that it was "about 98 percent from the machine".[246][247] The ChatGPT-generated avatar told the people, "Dear friends, it is an honor for me to stand here and preach to you as the first artificial intelligence at this year's convention of Protestants in Germany".
 Reactions to the ceremony were mixed. [248] The Last Screenwriter, a 2024 film created and directed by Peter Luisi, was written using ChatGPT, and was marketed as "the first film written entirely by AI". [249] The Guardian questioned whether any content found on the Internet after ChatGPT's release "can be truly trusted" and called for government
regulation.[250] This has led to concern over the rise of what has come to be called "synthetic media" and "AI slop" which are generated by AI and rapidly spread over social media, which we nonetheless try to
 understand or fit into our existing cultural horizon."[251] Many companies adopted ChatGPT and similar chatbot technologies into their product offers. These changes yielded significant increases in company valuations.[252][253][254] Reuters attributed this surge to ChatGPT's role in turning AI into Wall Street's buzzword.[254] Due to a "ChatGPT" and similar chatbot technologies into their product offers.
effect", retail investors to drove up prices of AI-related cryptocurrency assets despite the broader cryptocurrency market being in a bear market, and diminished institutional investor interest. [255] [256] An experiment by finder.com conducted from March to April 2023 revealed that ChatGPT could outperform popular fund managers by picking stocks
based on criteria such as growth history and debt levels, resulting in a 4.9% increase in a hypothetical account of 38 stocks, outperforming 10 benchmarked investment funds with an average loss of 0.8%.[257] Despite decades of using AI, Wall Street professionals report that consistently beating the market with AI, including recent large language
models, is challenging due to limited and noisy financial data.[258] The uses and potential of ChatGPT in health care has been the topic of scientific publications and experts have shared many opinions. MedPage Today noted in January 2023 that "researchers have published several papers now touting these AI programs as useful tools in medical
 education, research, and even clinical decision making."[259] Another publication predicted that clinicians will use generative AI more in the future but did not expect to see AI replacing clinicians for medical licensing, for example the United
 States Medical Licensing Examination and the Specialty Certificate Examination in Dermatology. ChatGPT can be used to assist professionals with diagnosis and staying up to date with clinical guidelines. [259] ChatGPT shows inconsistent responses, lack of specificity, lack of control over patient data, and a limited ability to take additional context
(such as regional variations) into consideration. [262] [263] The hallucinations characteristic of LLMs pose particular danger in medical education, it can attempt to explain complex concepts, generating case scenarios, and can be used by students
 who are preparing for licensing examinations.[262] According to a 2024 study in the International Journal of Surgery, concerns include "research fraud, lack of originality, ethics, copyright, legal difficulties, hallucination".[262] ChatGPT's ability to come up with false or faulty citations was highly criticized.[262][264] In January 2023, Massachusetts
State Senator Barry Finegold and State Representative Josh S. Cutler proposed a bill partially written by ChatGPT",[265][266][267] which would require companies to disclose their algorithms and data collection practices to the office of the
 State Attorney General, arrange regular risk assessments, and contribute to the prevention of plagiarism. [268] On April 11, 2023, a session court judge in Pakistan used ChatGPT to decide the bail of a 13-year-old accused in a matter. The court guoted the use
of ChatGPT assistance in its verdict: Can a juvenile Justice System Act 2018, according to section 12, the court can grant bail on certain conditions. However, it is up to the court to decide whether or not a 13-year-old suspect will
be granted bail after arrest. The judge asked ChatGPT other questions about the case and formulated his final decision in light of its answers. [270][271] In Mata v. Avianca, Inc., a personal injury lawsuit filed in May 2023, the plaintiff's attorneys used ChatGPT to generate a legal motion. [272][273] The attorneys were sanctioned for filing the motion
and presenting the fictitious legal decisions ChatGPT generated as authentic.[274] In October 2023, the council of Porto Alegre, Brazil, unanimously approved a local ordinance proposed by councilman Ramiro Rosário that would exempt residents from needing to pay for the replacement of stolen water consumption meters; the bill went into effect on
November 23. On November 29, Rosário revealed that the bill had been entirely written by ChatGPT, and that he had presented it to the rest of the council without making any changes or disclosing the chatbot's involvement. [268][275][276] The city's council president, Hamilton Sossmeier, initially criticized Rosário's initiative, saying it could
represent "a dangerous precedent",[276][277] but later said he "changed his mind": "unfortunately, this is going to be a trend."[268][275] In December 2023, a self-representing litigant in a tax case before the First-tier Tribunal in the United Kingdom cited a series of hallucinated cases purporting to support her argument that she had a
reasonable excuse for not paying capital gains tax owed on the sale of property. [278] The judge warned that the submission of nonexistent legal authorities meant that both the Tribunal and HM Revenue and Customs had "to waste time and public money", which "reduces the resources available to progress the cases of other court users who are
 waiting for their appeals to be determined".[280] Judge Kevin Newsom of the US Court of Appeals for the Eleventh Circuit endorsed the use of ChatGPT and noted that he himself uses the software to help decide rulings on contract interpretation issues.[281][282] In July 2024, the American Bar Association (ABA) issued its first formal ethics opinion
on attorneys using generative AI. It guides attorneys to make their own decisions regarding AI usage and its impacts on their clients and acknowledge a rapidly shifting set of AI capabilities. [283] Judge Julien Xavier Neals of the US District Court for
the District of New Jersey withdrew an opinion denying a motion to dismiss after discovering that the document contained misstated case outcomes and fabricated quotations attributed to judicial opinions and to the defendants. According to Judge Neals in October 2025, a law-school intern used ChatGPT in the legal research for the opinion. [284]
Portals: Language Technology Artificial general intelligence - Type of AI with wide-ranging abilities Ethics of artificial intelligence software agent which acts autonomously List of large language models Lists of open-source artificial intelligence software agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts autonomously List of large language models Lists of open-source artificial intelligence agent which acts artificial intelligence agent which acts are source artificial intelligence agent a
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Survey of Large Language Models". arXiv:2303.18223 [cs.CL]. Prompt engineering guide from OpenAI Wikimedia Commons has media related to ChatGPT. Official website Chatgpt at Instagram Retrieved from "2Real-time text-to-speech AI tool 15.aiScreenshot of the 15.dev web interface on May 23, 2025Type of siteArtificial intelligence, speech
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synthesis, generative artificial intelligenceAvailable inEnglishOwner15Founder15URL15.dev (formerly 15.ai)CommercialNoRegistrationNoneLaunchedMarch 2020; 5 years ago (2020-03)Current statusActive My Little Pony: Equestria Girls (2013-2020)
(List of animations) My Little Pony: Pony Life (2020-2021)(List of episodes) CharactersMane Six Twilight Sparkle Rainbow Dash Pinkie Pie Applejack Fluttershy Rarity Main Supporting Spike Princess Cadance Shining Armor Recurring Characters Discord Starlight Glimmer Cutie Mark Crusaders The Great and
Powerful Trixie Zecora Sunburst Thorax Antagonists Queen Chrysalis Lord Tirek Cozy Glow King Sombra Grogar Background/Fan Favorites Derpy Hooves Background/Fan Favorites Derpy Hooves Background/Fan Favorites Derpy Hooves Background Six Cheese Sandwich Quibble Pants The Wonderbolts Aunt Holiday and Auntie Lofty Equestria Girls Sunset Shimmer Seasons & episodesSeason 1 (2010–2011) "Friendship Is Magic"
"The Ticket Master" "Applebuck Season" "Griffon the Brush Off" "Boast Busters" "Dragonshy" "Look Before You Sleep" "Bridle Gossip" "Swarm of the Century" "Winter Wrap Up" "Call of the Cutie" "Fall Weather Friends" "Suited for Success" "Feeling Pinkie Keen" "Sonic Rainboom" "Stare Master" "The Show Stoppers" "A Dog and Pony Show" "Green
Isn't Your Color" "Over a Barrel" "A Bird in the Hoof" "The Cutie Mark Chronicles" "Owl's Well That Ends Well" "Party of One" "The Best Night Ever" Season 2 (2011-2012) "The Return of Harmony" "Lesson Zero" "Luna Eclipsed" "Sisterhooves Social" "The Cutie Pox" "May the Best Pet Win!" "The Mysterious Mare Do Well" "Sweet and Elite" "Secret
of My Excess" "Hearth's Warming Eve" "Family Appreciation Day" "Baby Cakes" "The Last Roundup" "The Super Speedy Cider Squeezy 6000" "Read It and Weep" "Hurricane Fluttershy" "Ponyville Confidential" "MMMystery on the Friendship
Express" "A Canterlot Wedding" Season 3 (2012-2013) "The Crystal Empire" "Too Many Pinkie Pies" "One Bad Apple" "Magic Duel" "Sleepless in Ponyville" "Wonderbolts Academy" "Apple Family Reunion" "Spike at Your Service" "Keep Calm and Flutter On" "Just for Sidekicks" "Games Ponies Play" "Magical Mystery Cure" Season 4 (2013-2014)
"Princess Twilight Sparkle" "Castle Mane-ia" "Daring Don't" "Flight to the Finish" "Power Ponies" "Bats!" "Rarity Takes Manehattan" "Pinkie Apple Pie" "Rainbow Falls" "Three's a Crowd" "Pinkie Pride" "Somepony to Watch Over Me" "Maud Pie" "For Whom the Sweetie Belle Bel
Toils" "Leap of Faith" "Testing Testing Testin
Hooffields and McColts" "The Cutie Re-Mark" Season 6 (2016) "A Hearth's Warming Tail" "The Times They Are a Changeling" Season 7 (2017) "The Last Crusade" Series finale Media Films & specials My Little Pony: The Movie (2017) My Little Pony: Best Gift Ever (2018) My
Little Pony: Rainbow Roadtrip (2019) Music Theme song "This Day Aria" Movie Soundtrack "Rainbow" "Off to See the World" Games My Little Pony/Transformers Brony fandomFan works (list) 15.ai 15
Voiceverse NFT plagiarism scandal A Brony Tale Bronies (documentary) Derpibooru Equestria Daily FIMFiction Fallout: Equestria Friendship Is Witchcraft Legends of Equestria Love & Ponysona Fon fiction Military
bronies /mlp/ Online communities My Little Pony conventions BABSCon BronyCon Czequestria Everfree Northwest GalaCon Ponyville Ciderfest RuBronyCon TrotCon UK PonyCon Vanhoover Pony Expo vte 15.ai is a free non-commercial web application and research project that uses artificial intelligence to generate text-to-speech voices of
fictional characters from popular media. Created by a pseudonymous artificial intelligence research at the Massachusetts Institute of Technology (MIT), the application allows users to make characters from video games, television shows, and
movies speak custom text with emotional inflections. The platform is able to generate convincing voice output using minimal training data; the name "15.ai" references the creator's statement that a voice can be cloned with just 15 seconds of audio. It was an early example of an application of generative artificial intelligence during the initial stages of
the AI boom. Launched in March 2020, 15.ai became an Internet fandoms, such as the My Little Pony: Friendship Is Magic, Team Fortress 2, and SpongeBob SquarePants fandoms. The service featured emotional context
through emojis, precise pronunciation control, and multi-speaker capabilities. Critics praised 15.ai is credited as the first platform to popularize AI voice cloning
in memes and content creation.[a] Voice actors and industry professionals debated 15.ai's implications, raising concerns about employment impacts, voice-related fraud, and potential misuse. In January 2022, it was discovered that a company called Voiceverse had generated voice lines using 15.ai without attribution, promoted them as the byproduct
of their own technology, and sold them as non-fungible tokens (NFT) without permission. News publications universally characterized this incident as the company having "stolen" from 15.ai.[b] The service went offline in September 2022 due to legal issues surrounding artificial intelligence and copyright. Its shutdown was followed by the emergence
of commercial alternatives whose founders have acknowledged 15.ai's pioneering influence in the field of deep learning speech synthesis. On May 18, 2025, 15 launched 15.dev as the sequel to 15.ai. [...] The website has multiple purposes. It serves as a proof of concept of a platform that allows anyone to create content, even if they can't hire someone
to voice their projects. It also demonstrates the progress of my research in a far more engaging manner - by being able to use the actual model, you can discover things about it that even I wasn't aware of (such as getting characters to make gasping noises or moans by placing commas in between certain phonemes). It also doesn't let me get away
with picking and choosing the best results and showing off only the ones that work [...] Being able to interact with the model with no filter allows the user to judge exactly how good the current work is at face value. 15, Hacker News[37] For broader coverage of this topic, see Deep learning speech synthesis § History. See also: History of speech
synthesis The field of speech synthesis underwent a significant transformation with the introduction of deep learning approaches. In 2016, DeepMind's publication of the WaveNet paper marked a shift toward neural networks. Previously, concatenative
synthesis—which worked by stitching together pre-recorded segments of human speech—was the predominant method for generating artificial speech, but it often produced robotic-sounding results at the boundaries of sentences.[38] In 2018, Google AI's Tacotron 2 showed that neural networks could produce highly natural speech synthesis but
required substantial training data (typically tens of hours of audio) to achieve acceptable quality. When training data, the output quality degraded while still being able to maintain intelligible speech; with 24 minutes of training data, the output quality degraded while still being able to maintain intelligible speech. [39] The same year saw the emergence of HiFi
GAN, a generative adversarial network (GAN)-based vocoder that improved the efficiency of waveform generation while producing high-fidelity speech, [40] followed by Glow-TTS, which introduced a flow-based approach that allowed for both fast inference and voice style transfer capabilities. [41] Chinese tech companies like Baidu and ByteDance also
made contributions to the field by developing breakthroughs that further advanced the technology. [42] Derpy Hooves reciting the FitnessGram PACER test introduction in a neutral emotion #2 Variation #2 Variation #3 Problems playing these files? See media help. 15. ai was conceived in 2016 as a research project in deep learning
speech synthesis by a developer known as 15 (at the age of 18[44]) during their freshman year at MIT as part of its Undergraduate Research Opportunities Program.[45] 15 was inspired by DeepMind's WaveNet paper, with development continuing through their studies as Google AI released Tacotron 2 the following year. By 2019, they had
demonstrated at MIT their ability to replicate WaveNet and Tacotron 2's results using 75% less training data than previously required.[42] The name "15.ai" is a reference to the developer's statement that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with as little as 15 seconds of data.[46] 15 had originally planned to pursue a PhD based on their undergraduate research that a voice can be cloned with a 
but opted to work in the tech industry instead after their startup was accepted into the Y Combinator accelerator in 2019. After their departure in early 2020, 15 returned to their voice synthesis research and began implementing it as a web application. According to a post on X from 15, instead of using conventional voice datasets like LJSpeech that
contained simple, monotone recordings, they sought out more challenging voice samples that could demonstrate the model's ability to handle complex speech patterns and emotional undertones. [tweet 1] During this phase, 15 discovered the Pony Preservation Project, a collaborative project started by /mlp/, the My Little Pony board on 4chan. [47]
Contributors of the project had manually trimmed, denoised, transcribed, and emotion-tagged thousands of voice lines from My Little Pony: Friendship Is Magic and had compiled them into a dataset that provided ideal training material for 15.ai.[48] 15.ai was released in March 2020[44] as a free and non-commercial web application that did not
require user registration to use, but did require the user to accept its terms of service before proceeding.[12] At the time of its launch, the platform had a limited selection of available characters, including those from My Little Pony: Friendship Is Magic and Team Fortress 2.[49] Users were permitted to create any content with the synthesized voices
under two conditions: they had to properly credit 15.ai by including "15.ai" in any posts, videos, or projects using the generated audio;[50] and they were prohibited from mixing 15.ai outputs with other text-to-speech outputs in the same work to prevent misrepresentation of the technology's capabilities.[51] More voices were added to the website in
the following months. In late 2020, 15 implemented a multi-speaker embedding in the deep neural network, which enabled the simultaneous training of multiple voices. [42] Following this, the website's roster expanded from eight to over fifty characters. [44] In addition, this implementation allowed the deep learning model to recognize common
emotional patterns across different characters, even when certain emotions were missing from the characters' training data.[52] By May 2020, the site had served over 4.2 million audio files to users.[53] In early 2021, the application gained popularity after skits, memes, and fan content created using 15.ai went viral on Twitter, TikTok, Reddit, and the characters' training data.[52] By May 2020, the site had served over 4.2 million audio files to users.
Twitch, Facebook, and YouTube.[54] At its peak, the platform incurred operations; despite receiving offers from companies to acquire 15.ai and its underlying technology, the website remained independent and was funded out of the
personal previous startup earnings of the developer.[42] Main article: Voiceverse NFT plagiarism scandal See also: Non-fungible token § Plagiarism and fraud, and Artificial intelligence controversies A satirical meme representing the "right-click, save as" criticism of NFTs. Critics of Voiceverse pointed out the irony of selling ownership rights to AI
 voices when they themselves had stolen 15.ai's technology. On January 14, 2022, 15 discovered that a blockchain-based company called Voiceverse had generated voice technology without permission or attribution, [56] and sold them as NFTs. [57] This came
shortly after 15 had stated in December 2021 that they had no interest in incorporating NFTs into their work.[58] A screenshot of the log files posted by 15 showed that Voiceverse had generated audio of characters from My Little Pony: Friendship Is Magic using 15.ai and pitched them up to make them sound unrecognizable,[59] a violation of 15.ai's
terms of service, which explicitly prohibited commercial use and required proper attribution. [60] When confronted with evidence, Voiceverse stated that their marketing team had used 15.ai without proper attribution while rushing to create a demo. [61] In response, 15 tweeted "Go fuck yourself," [62] which went viral, amassing hundreds of thousands
of retweets and likes on Twitter in support of the developer.[42] The tweeted: I'm partnering with @VoiceverseNFT to explore ways where together we might bring new tools to new creators to make new things, and allow everyone a
chance to own & invest in the IP's they create. We all have a story to tell. You can hate. Or you can create. What'll it be? January 14, 2022[63] The controversy raised concerns about NFT projects, which, according to critics, were frequently associated with intellectual property theft and questionable business practices.[64] The incident was
documented in the AI Incident Database (AIID)[23] and the AI, Algorithmic, and Automation Incidents and Controversies (AIAAIC) repository, [24] and was also featured in Molly White's Web3 Is Going Just Great website. [17] Pavel Khibchenko of Skillbox listed the incident as an example of fraud in NFTs. [65] Voice actor and YouTuber Yong Yea
criticized voice NFTs for their potential impact on the voice acting industry[25] and stated in a YouTube video that Voiceverse deliberately plagiarized 15.ai's superior technology to falsely market voice NFTs.[video 1]:15:54-16:13 In a 2024 class action lawsuit filed against LOVO, Inc., the parent company of Voiceverse, court documents cited theorem.
company's prior theft of 15.ai's technology as part of the case. [66] Voice actor Troy Baker, who had announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and for his confrontational announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and for his confrontational announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and for his confrontational announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and for his confrontational announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and for his confrontational announced his partnership with Voiceverse alongside their promotion of the stolen AI voices, faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting an NFT project and faced mounting criticism for supporting and faced mounting criticism for s
revelation, Baker acknowledged that his original tweet was "antagonistic" [68] and on January 31, announced that he would discontinue his partnership with Voiceverse. [69] In September 2022, 15.ai was taken offline. [70] In a post on Twitter, 15 suggested a future version that would better address copyright concerns from the outset. [42] During this
period of inactivity, voice AI startups continued to cite 15.ai as a major influence to the field (71) Y Combinator startup PlayHT called the debut of 15.ai "a breakthrough in the field of text-to-speech (TTS) and speech synthesis".[72] Cliff Weitzman, the founder and CEO of Speechify, credited 15.ai for "making AI voice cloning popular for content
creation by being the first [...] to feature popular existing characters from fandoms".[73] Mati Staniszewski, co-founder and CEO of ElevenLabs, wrote that 15.ai was transformative in the field of AI text-to-speech.[74] On May 18, 2025, 15 launched 15.dev as the official sequel to 15.ai.[75][tweet 2][76] Fandom news site Equestria Daily reported that
the website included "almost every voiced pony in the show" with "a dropdown for various emotions you want to generate voice line variations from 15.ai is non-commercial, has no advertisements, generates no revenue, and operates without requiring
user registration or accounts.[78] Users are able to generate speech by inputting text and selecting a character voice, with optional parameters for emotional deliveries.[79] Characters available included multiple characters from Team
Fortress 2 and My Little Pony: Friendship Is Magic, including the Mane Six and Derpy Hooves; GLaDOS, Wheatley, and the Sentry Turret from the Portal series; SpongeBob SquarePants; Kyu Sugardust from HuniePop, Rise Kujikawa from Persona 4; Daria Morgendorffer and Jane Lane from Daria; Carl Brutananadilewski from Aqua Teen Hunger
Force; Steven Universe from Steven Universe; Sans from Undertale; Madeline and multiple characters from Celeste; the Tenth Doctor Who; the Narrator from The Stanley Parable; and HAL 9000 from 2001: A Space Odyssey.[80] Silent characters like Chell and Gordon Freeman were able to be selected and would emit silent audio files when any text
was submitted.[81] Characters from Undertale and Celeste did not produce spoken words but instead generated by the DeepMoji model. These emoji distributions were displayed on 15.ai as part of its technical metrics and graphs.[83] From
2020, 15.ai has generated audio at 44.1 kHz sampling rate—higher than the 16 kHz standard used by most deep learning text-to-speech systems of that period. This higher fidelity creates more detailed audio spectrograms and greater audio resolution with the tradeoff that imperfections in the synthesis are more noticeable. [84] 15.ai processes speech
using customized deep neural networks and specialized audio synthesis algorithms. [85] While its underlying technology could produce 10 seconds of processing time (i.e. faster-than-real-time), the user experience often involves longer waits as the servers manages thousands of simultaneous requests, sometimes taking
more than a minute to deliver results.[86] Due to its nondeterministic design, 15.ai produces variations in its speech output. 15.ai introduced the concept of emotional contextualizers, which allowed users to specify the emotional tone of generated speech through guiding phrases.[87] The emotional contextualizer functionality utilized DeepMoji, a
sentiment analysis neural network developed at the MIT Media Lab that processed emoji embeddings from 1.2 billion Twitter posts to analyze their emotional context (specified by a vertical bar), the additional context following the bar would be used as the emotional contextualizer.[88] For
example, if the input was Today is a great day! I'm very sad., the selected character would speak the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from someone saying the sentence "I'm very sad., the selected character would expect from some saying the sentence "I'm very sad., the selected character would expect from some saying the sentence "I'm very sad., the selected character would expect from some saying the sentence "I'm very sad., the selected character would expect from some saying the sentence "I'm very sad., the selected character would expect from some saying the sentence "I'm very sad., the selected character would expect from some saying t
string of ARPABET phonemes, then is passed through a pitch predictor and a mel-spectrogram generator to generate audio. 15.ai uses pronunciation data from Oxford Dictionary, which uses ARPABET phonemes, then is passed through a pitch predictor and a mel-spectrogram generator to generate audio. 15.ai uses pronunciation data from Oxford Dictionary, which uses ARPABET phonemes, then is passed through a pitch predictor and a mel-spectrogram generator to generate audio. 15.ai uses pronunciation data from Oxford Dictionary, and CMU Pronouncing Dictionary, and CMU Pronouncin
curly braces to correct mispronunciations.[50] 15.ai's interface uses color-coding to indicate pronunciation certainty[50] and also displays technical metrics, graphs, and comprehensive model analytics, which has included sentiment analysis and automatic improvements to the vocoder.[44] The platform limits its prompt to 200 characters; users can
combine multiple generations for longer speech sequences. [90] Later versions of 15.ai introduced multi-speaker capabilities. Rather than training separate models for each voice, 15.ai introduced multi-speaker capabilities. Rather than training separate models for each voice, 15.ai introduced multi-speaker capabilities.
characteristics.[42] Along with the emotional context conferred by DeepMoji, this allows the deep learning model to learn shared patterns across different characters' emotional expressions and speaking styles, even when characters lack examples of certain emotions in their training data.[91] Critics described 15.ai as easy to use and generally able
to convincingly replicate character voices, with occasional mixed results.[92] Natalie Clayton of PC Gamer wrote that SpongeBob SquarePants' voice was replicated well, but described challenges in mimicking the Narrator from the The Stanley Parable: "the algorithm simply can't capture Kevan Brighting's whimsically droll intonation."[93] Zack
Zwiezen of Kotaku reported that "[his] girlfriend was convinced it was a new voice line from GLaDOS' voice actor".[94] Taiwanese newspaper United Daily News also highlighted 15.ai's ability to recreate GLaDOS's mechanical voice, alongside its diverse range of character voice options.[95] Yahoo! News Taiwan reported that "GLaDOS in Portal can
pronounce lines nearly perfectly", but also criticized that "there are still a little weird in some words." [96] Chris Button of Byteside called the ability to clone a voice with only 15 seconds of data "freaky," but also described the tech behind it as "impressive." [97] Robin Lamorlette
of Clubic described the technology as "devilishly fun" and wrote that Twitter and YouTube were filled with creative content from users experimenting with documented updates, fan creations, and additions of new character voices. In a post
introducing new character additions to 15.ai, Equestria Daily's founder Shaun Scotellaro wrote that "some of [the voices] aren't great due to the lack of samples to draw from, but many are really impressive still anyway."[99] Chinese My Little Pony fan site EquestriaCN also documented 15.ai's development and its updates, though they criticized some
of its bugs and long queue wait times.[100] Peter Paltridge of Anime Superhero News opined that "In some ways, SAM is still more advanced than this. It was possible to affect SAM's inflections by
using special characters, as well as change his pitch at will. With 15.ai, you're at the mercy of whatever random inflections you get."[101] Conversely, Lauren Morton of Rock, Paper, Shotgun praised the depth of pronunciation control—"if you're willing to get into the nitty gritty of it".[102] Similarly, Eugenio Moto of Qore.com wrote that "the most
experienced of users can change parameters like the stress or the tone."[103] Takayuki Furushima of Den Fami Nico Gamer highlighted the "smooth pronunciations", and Yuki Kurosawa of AUTOMATON wrote that its "rich emotional expression" was a major feature; both Japanese authors mentioned the lack of Japanese-language support.[104] Renan
do Prado of Arkade and José Villalobos of LaPS4 remarked that while users could create amusing results in Portuguese and Spanish respectively, the generation performed best in English.[105] Chinese gaming news website GamerSky called the app "interesting", but also criticized the word count limit of the text and the occasional lack of intonations.
[106] Marco Cocomello of GLITCHED remarked that despite the 200-character limitation, the results "blew [him] away" when testing the app with GLaDOS's voice. [107] Spanish author Álvaro Ibáñez wrote in Microsiervos that he found the rhythm of the AI-generated voices interesting and that 15.ai was able to adapt its delivery based on the text's
meaning.[108] AI researchers and practitioners provided more in-depth analysis of 15.ai's capabilities and limitations compared to other text-to-speech technologies of the time. Google DeepMind senior research scientist Alex Irpan wrote that when 15.ai launched in 2020, it was "arguably the highest quality voice generation model in the world" and
superior to models developed by Google AI.[109] In their explanation for why they plagiarized from 15.ai, Voiceverse wrote that "the best voice [their marketing team] could find was not [theirs] but 15.ai['s]".[110] Rionaldi Chandraseta of Towards Data Science wrote that voice models trained on larger datasets created more convincing output with
better phrasing and natural pauses, particularly for extended text.[85] Parth Mahendra of AI Daily wrote that while the system "does a good job at accurately replicating most basic words," it struggled with more complex terms, noting that characters would "absolutely butcher the pronunciation" of certain words.[53] Dan Ruta, the creator of a
downloadable voice AI tool called xVASynth, wrote that in comparison, cloud-based tools like 15.ai among examples of underrated talent in AI and machine learning.[112] Chinese AI researchers also offered various technical assessments
Machine learning professor Yonggiang Li wrote that 15.ai "perfectly preserves the rhythm and characteristics of the speaker," and remarked that the application was still free despite having 5,000 people generating voices concurrently at the time of writing.[113] Bai Feng of XinZhiYuan on QQ News highlighted the technical achievement of 15.ai's
high-quality output despite using minimal training data and wrote that it was of significantly higher quality than typical deep learning models typically ext-to-speech implementations. Feng also acknowledged that while some pronunciation errors occurred due to the limited training data, it was understandable given that contemporary deep learning models typically
required 40 or more hours of audio.[114] Ji Yunyo of NetEase News called the technology behind 15.ai "remarkably efficient" but also criticized its emotional limitations, writing that the emotional expression was relatively "neutral" and that "extreme" emotions couldn't be properly synthesized, making it less suitable for not safe for work applications
[115] Ji also wrote that while many deepfake videos required creators to extract and edit material from hours of original content for very short results, 15.ai could achieve similar or better effects with only a few dozen minutes of training data per character. [116] Ellen McLain (voice of GLaDOS in Portal) and John Patrick Lowrie (voice of the Sniper in
had discovered 15.ai when a prospective intern showed him a skit she had created using AI voices of the Team Fortress 2 characters.[video 2]:0:51:50 Lowrie commented: "The technology still has a long way to go before you really believe that these are just human beings, but I was impressed by how much [15.ai] could do. [...] You certainly don't get
the delivery that you get from an actual person who's analyzed the scene, [...] but I do think that as a fan source—for people wanting to put together mods and stuff like that—that it could be fun for fans to use the voices of characters they like."[video 2]: 0:53:12 He drew an analogy to synthesized music, adding: "If you want the sound of a choir, and
you want the sound of an orchestra, and you have the money, you hire a choir and an orchestra. "[video 2]:1:01:10 In a 2021 live broadcast on his Twitch channel, Nathan Vetterlein—the voice actor of the Scout from Team
 Fortress 2—listened to an AI recreation of his character's voice and commented: "It's interesting; it's all right. There's some stuff in there".[video 3] See also: Deepfake § Concerns and countermeasures Other voice actors had mixed reactions to 15.ai's capabilities. While some industry professionals acknowledged the technical innovation, others raised
concerns about the technology's implications for their profession. [117] When voice actor Troy Baker announced his partnership with Voiceverse NFT, which had misappropriated 15. ai's technology, critics raised concerns about automated voice actors, risk of voice impersonation, and
potential misuse in explicit content.[118] Ruby Innes of Kotaku Australia wrote that "this practice could potentially put voice act for a project and paying them."[12] In her coverage of the Voiceverse controversy, Edith Wakelin-King of Checkpoint Gaming
 raised the concern that "this kind of technology has the potential to push voice actors out of work if it becomes easier and characters and did not reproduce voices of real people or celebrities,[50] computer scientist Andrew Ng commented
that similar technology could be used to do so, including for nefarious purposes.[49] In his 2020 assessment of 15.ai, Ng outlined potential "enormously productive" applications of voice cloning, such as revolutionizing the use of virtual actors in Hollywood, enabling voice actors to participate in more cartoon and audiobook productions, and allowing
content creators to use synthetic celebrity voices to narrate their scripts. [49] However, he also cautioned that it could be maliciously exploited to impersonate private individuals. [49] External videos January 15, 2021 CNN broadcast
showing a viral video that used 15.ai to replace Donald Trump's Home Alone 2 cameo with the Heavy Weapons Guy from Team Fortress 2 (occurs at ~1:16 in)[119] 15.ai was an early pioneer of audio deepfakes, and its popularity led to the emergence of AI speech synthesis-based memes during the initial stages of the AI boom in 2020. 15.ai is
credited as the first platform to popularize AI voice cloning in Internet memes and content creation,[a] particularly through its ability to generate convincing character voices in real-time without requiring extensive technical expertise.[120] The platform's impact was especially large in fan communities, such as the My Little Pony: Friendship Is Magic
Portal, Team Fortress 2, and SpongeBob SquarePants fandoms, where it enabled the creations of views on social media.[121] Team Fortress 2 content creations included skits and fan
animations,[122] crossover content,[123] recreations of viral videos, and musical compositions of fan fiction,[44] music videos, and musical compositions of viral videos, and musical videos of viral videos of
a daytime CNN segment in January 2021.[119] Another noted creation was a 17-minute fan-made episode of Friendship Is Magic titled "The Tax Breaks", which was produced using 15.ai's character voices.[44] Some users integrated 15.ai with voice command software to create virtual assistants.[125] External videosMay 13, 2022 "The Tax Breaks", a
17-minute fan-made episode of Friendship Is Magic produced using character voices from 15.ai[44] Its influence since its launch has been publicly recognized, with commercial alternatives like ElevenLabs[c] and Speechify emerging to fill the void after its initial shutdown.[127] Multiple contemporary generative voice AI companies have
acknowledged 15.ai's pioneering role.[109] 15.ai established technical precedents that influenced subsequent developments in AI voice synthesis. Its integration of DeepMoji for emotional analysis demonstrated the viability of incorporating sentiment-aware speech generation, [128] while its support for ARPABET phonetic transcriptions set a standard the viability of incorporating sentiment-aware speech generation, [128] while its support for ARPABET phonetic transcriptions set a standard transcription for 
for precise pronunciation control in public-facing voice synthesis tools.[42] The platform's multi-speaker model, which enabled simultaneous training of diverse character voices, allowed the system to recognize emotional patterns across different voices even when certain emotions were absent from individual character training sets.[91] 15.ai also
contributed to the reduction of training data requirements for speech synthesis. Contemporary models like Tacotron 2 required tens of hours of audio to produce acceptable results and failed to generate speech with substantially
less training data; the name "15.ai" refers to the creator's statement that a voice can be cloned with just 15 seconds of data.[42] The 15-second benchmark became a reference point for subsequent voice synthesis systems; the original statement that only 15 seconds of data is required to clone a human's voice was corroborated by OpenAI in 2024.
[129] Character.ai - AI chatbot service Ethics of artificial intelligence Foundation model - Artificial intelligence model paradigm ^ a b In particular, it has been credited as such by the following: Rock Paper Shotgun,[1] Clubic,[2] GLITCHED,[3] United Daily News,[4] Analytics India Magazine,[5] Inverse,[6] Speechify,[7] The Guardian (Nigerian
newspaper),[8] Independent Nigeria,[9] and Alex Irpan.[10] ^ including the following news publications: The Mary Sue,[11] Kotaku Australia,[12] Eurogamer,[13] NME,[14] Muropaketti,[15] Gamereactor,[16] Web3 Is Going Just Great,[17] StopGame,[18] iXBT Games,[19] DTF,[20] Sport.es,[21] FZ,[22] AI Incident Database,[23] AI, Algorithmic, and
Automation Incidents and Controversies, [24] The Journal, [25] LevelUp, [26] Stevivor, [27] PlayStation Universe, [28] Checkpoint Gaming, [29] Tech Times, [30] Mobidictum, [31] OtakuPT, [32] GameGuru, [34] Shazoo, [35] and Geek Culture, [36] ^ which uses "11.ai" as a legal byname for its web domain [126] ^ Morton 2021: "Machine
learning is absolutely fascinating and yet I mostly just enjoy when people use impressive tech to create weird skits and memes. That's exactly what everyone appears to be doing with an extremely impressive machine-learning tool that lets you type in text for various characters to say out loud. [...] It's made possible by the text to speech algorithm
15.ai that studies clips of characters and uses deep-learning to make those characters say whatever the heck you want." ^ Lamorlette 2021: "Vous avez toujours rêvé de faire dire n'importe quoi à vos personnages de jeux vidéo préférés (ou détestés) ? Le site 15.ai l'a fait !" (transl. "Have you always dreamed of making your favorite (or hated) video
game characters say anything? 15.ai has finally made it happen!") ^ Cocomello 2021: "However, back then if you wanted to create your own dialogue, it required layers of sound enhancements and tweaks. Thankfully, the world has evolved and now thanks to the 15.ai app, we can make [...] popular characters say whatever we want" ^ MrSun 2021:
 "大家是否都曾經想像過,假如能讓自己喜歡的遊戲或是動畫角色說出自己想聽的話,不論是名字、惡搞或是經典名言,都是不少人的夢想吧。不過來到 2021 年,現在這種夢想不再是想想而已,因為有一個網站通過 AI 生成的技術",(transl. "Have you ever imagined what it would be like if your favorite game or anime characters could say exactly what you want to hear? Whether
it's names, parodies, or classic quotes, this is a dream for many. However, as we enter 2021, this dream is no longer just a fantasy, because there is a website that uses AI-generated technology,") ^{\sim} VK 2023: "AI voice tools used to create "audio
deepfakes" have existed for years in one form or another, with 15.ai being a notable example." ^ Weitzman 2023: "It gained popularity because it was the first AI voice platform that featured an assortment of fictional characters from a variety of media sources" ^ Temitope 2024: "During this period, 15.ai earned credit for single-handedly popularizing
AI voice cloning—often described as 'audio deepfakes'—in memes, viral content, and fan-driven media." ^ Abisola 2025: "Many credit 15.ai for creating the market they now compete in." ^ Lawrence 2022. ^ a b c
Innes 2022. ^ Phillips 2022. ^ a b Williams 2022. ^ Baylos 2022. ^ Byright 202
Aktaş 2022. ^ Archer 2022. ^ Ifram 2022. ^ Ifram 2022. ^ Kuchkanov 2022. ^ Koən 2022. ^ Toh 2022. ^ Toh 2022. ^ Barakat, Turk & Demiroglu 2024. ^ a b c d e f g h i Temitope 2024. ^ "Examples". May 15, 2025. Retrieved May 16, 2025. ^ a b c d e f g h Abisola 2025. ^ Chandraseta
2021; Li 2021; Temitope 2024. ^ Phillips 2022; Temitope 2024; Abisola 2025. ^ Branwen 2020. ^ 
2025. ^ a b Mahendra 2020. ^ Ruppert 2021; Abisola 2025. ^ Temitope 2024; Abisola 2025. ^ Temitope 2022; Williams 2022; Willia
Muropaketti 2022; Ifram 2022; Milliams 2022; AIAAIC 2022. ^ Innes 2022; AIAAIC 2022. ^ Rojh 2022; Myrén 2022; Myr
Sage, et al. v. LOVO, Inc., No. 1:24-cv-03770, 38 (S.D.N.Y. 2024) ("Separately, VoiceVerse has already been found to have stolen technology from another company. See Ule Lopez, WCCF Tech, "VoiceVerse has already been found to have stolen technology from another company. See Ule Lopez, WCCF Tech, "VoiceVerse has already been found to have stolen technology from another company. See Ule Lopez, WCCF Tech, "VoiceVerse has already been found to have stolen technology from the original on October 4, 2025. ^ Lawrence 2022;
Innes 2022; White 2022; Wakelin-King 2022. A Wright 2022; White 2022; Carcasole 2022; Enriquez 2022. A Parker 2022; Granger 2022. A Staniszewski 2024. Temitope 2024; Irpan 2025. Archived from the original on October 1,
2025. Retrieved May 18, 2025. ^ Eghosa 2025. ^ Eghosa 2025. ^ Scotellaro 2025. ^ Williams 2022; Wright 2022; Innes 2022. ^ Williams 2021; Kurosawa 2021; Kurosawa 2021; Clayton 2021; Kurosawa 2021; Clayton 2021; Kurosawa 2021; Clayton 2021; Kurosawa 2021; Kurosawa 2021; Clayton 2021; Kurosawa 2021; Clayton 2021; Morton 2021; Mor
2025. ^ Feng 2020. ^ a b Chandraseta 2021. ^ Chandraseta 2021; Lamorlette 2021. ^ Chandraseta 2021; Lamorlette 2021. ^ Chandraseta 2021; Temitope 2024. ^ Chandraseta 2021: "By adding a '|' after the original sentence will be spoken with. In other words, 'text_1|text_2' will produce a voice line
of text 1 with the emotion of text 2." ^ Chandraseta 2021: "because it could force the bot into generating previously unknown data, such as saying 'Today is a great day' with a sad or angry emotion" ^ Cocomello 2021; Ruppert 2021. ^ a b Kurosawa 2021; Temitope 2024. ^ Clayton 2021; Ruppert 2021; Villalobos 2021; Cocomello 2021. ^ Clayton
2021. ^ Zwiezen 2021. ^ 遊戲 2021: "目前「15.ai」的網頁上,提供了不少的音源,[...]除了《傳送門》之外,15.ai 網站目前也支援了許多來自遊戲、電影或動畫中的人物語音," (transl. "Currently, the "15.ai" website currently also supports voices for many characters from games, movies or
animations. ^ MrSun 2021: "的 GLaDOS 也能完美的唸出任何台詞。當然網站也補充目前還有很多不完美的地方,像是字數限制、語氣控制在某些話上還是略有怪異,但只要肯花時間,也能像是其他網友一樣,通過剪輯來完成有趣的創作," (transl. "Even GLaDOS in "Portal" can perfectly recite any lines. Of course, the website also added that there are still many imperfections.
such as word limit and tone control, which are still a bit weird in some words, but as long as you are willing to spend time, you can also complete interesting creations through editing like other netizens.") ^ Button 2021. ^ Lamorlette 2021: "On peut donc retrouver sur ces réseaux de nombreux exemples de ce que peut donner le mélange entre un
esprit créatif et une technologie aussi efficace que diablement amusante." (transl. "These social networks are therefore full of examples of what can be achieved by combining a creative mind with technology that is as effective as it is devilishly fun.") ^ Scotellaro 2020. ^ www.equestriacn.com 2021. ^ Morton 2021. ^ Morton 2021. ^ Morton 2021.
"Incluso, los más clavados pueden cambiar algunos parámetros como la intencionalidad o el tono." (transl. "Actually, the most experienced of users can change some parameters like the stress or tone.") ^ Furushima 2021: 日本語入力には対応していないが、ローマ字入力でもなんとなくそれっぽい発音になる。; 15.aiはテキスト読み上げサービスだが、特筆すべきはそ
のなめらかな発音と、ゲームに登場するキャラクター音声を再現している点だ。 (transl. It does not support Japanese input, but even if you input using romaji, it will somehow give you a similar pronunciation and the fact that it reproduces the voices of
characters that appear in games.) Kurosawa 2021: "もうひとつ15.ai o大きな特徴として挙げられるのが、豊かな感情表現だ" (transl. "Another major feature of 15.ai is its rich emotional expression.") ^ do Prado 2021: "Obviamente o programa funcional expression." (transl. "Please note that this is an English voice only version.") ^ do Prado 2021: "Obviamente o programa funcional expression."
no idioma inglês, mas dá pra gerar umas frases bem emboladas e engraças em português, estilo aqueles memes usando vozes em outros idiomas falando em português." (transl. "Obviously, the program works in English, but you can generate some really confusing and funny sentences in Portuguese, like those memes using voices in other languages
speaking Portuguese.") Villalobos 2021: "En este sentido, en las últimas horas se ha hecho popular un sitio web que emula la voz de GlaDOS para que diga todas las palabras que quieras, siempre y cuando estén en inglés, aunque puedes escribir algo en español e intentará pronunciarlo, pero no lo hará correctamente." (transl. "In this sense, in recent
hours a website has become popular that emulates the voice of GlaDOS so that it says all the words you want, as long as they are in English, although you can write something in Spanish and it will try to pronounce it, but it will not do it correctly.") ^ GamerSky 2021: "虽然AI的声音缺少了些抑扬顿挫, 不过效果也还算有趣。" (transl. "Although the AI's voice
lacks some intonation, the effect is still interesting.") GamerSky 2021: "目前15.ai提供的角色选项较少,由于文本的字数限制,生成的语音也相对较短" (transl. "Currently, 15.ai provides relatively few character options, and due to the word limit of the text, the generated voice is relatively short.") 个 Cocomello 2021. 个 Ibáñez 2022: "Personalmente encontré
interesantes las pausas y el ritmo y que ciertamente se nota que según el contenido del texto se «interpreta» el resultado según lo que se intenta transmitir." (transl. "Personally, I found the pauses and rhythm interesting, and that it is certainly noticeable that depending on the content of the text, the result is 'interpreted' according to what is being
it is still currently completely free.") 个 Feng 2020: "该工具生成的音频文件的采样率为 44100 Hz, while most deep learning-based text-to-
深度模型通常有 40 个小时或者更多的语料 , 所以错误率会低一些。" (transl. "Of course, the model trained on such a small corpus is also flawed, and some words accurately when they encounter them. Traditional deep models usually
have 40 hours or more of corpus, so the error rate will be lower.") ^ Ji 2021: "但是由于情绪表现只能联系上下文进行自动识别,导致这些语音在情感表达上比较"中庸",一些"极端"的情绪无法通过语音合成正常表达,[...]距离其被正式用于某些NSFW的同人作品,还有很长的路要走。" (transl. "the emotional expression can only be automatically recognized in the context, which
常简短的内容,并且呈现效果还很一般。而15.ai的开发者表示,自己的这项技术可以轻松实现那些视频效果(事实上15.ai的许多角色进行深度学习的数据时长只有几十分钟)。" (transl. "Many of the "deep fake" videos that netizens see on YouTube rely on video creators to extract and edit hours of data to produce very short content, and the presentation effect is still very
average. The developers of 15.ai said that their technology can easily achieve those video effects (in fact, the data for deep learning of many characters of 15.ai is only tens of minutes long).") ^ Parker 2022; Remitope 2024. ^ a b Clayton 2021; CNN
2021; Moos 2021. ^ Ruppert 2021; Morton 2021. ^ ElevenLabs 2024; Morton 2021. ^ ElevenLabs 2024; Morton 2021; Morton 2021. ^ Cylin 2021; Morton 2021. ^ ElevenLabs 2024b. ^ Staniszewski 2024; Play.ht 2024; Weitzman 2023. ^ Osman 2022. ^ OpenAI 2024; Morton 2021. ^ ElevenLabs 2024b. ^ ElevenLabs 2024b. ^ ElevenLabs 2024; Morton 2021. ^ ElevenLabs 2024b. ^ ElevenLabs 2025. ^ ElevenLabs 2026. ^ ElevenLabs 20
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help page for transcluding these entries Showing 50 items. View (previous 50 | next 50) (20 | 50 | 100 | 250 | 500)Artificial intelligence (links | edit) Speech recognition (links | edit) Speech synthesis (links | edit) Neural network (machine learning) (links | edit) Parameter (links | edit) Speech recognition (links | edit) Speech synthesis (links | edit) Neural network (machine learning) (links | edit) Speech recognition (links | edit) Speech synthesis (links | edit) Spe
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validation, and test data sets (links | edit) View (previous 50 | next 50) (20 | 50 | 100 | 250 | 500) Retrieved from "WhatLinksHere/15.ai" ZDNET With more than 400 million monthly users, ChatGPT is the most popular of all AI chatbots. Trained on huge amounts of data, it can process written prompts and generate contextual answers which feel like
you're chatting to a human in real time. Based on a Large Language Model, the AI bot is evolving all the time. In its latest iteration, ChatGPT is capable of answering in-depth questions, helping with website code and even generating images. New features are being added all of the time, so read on to find out what ChatGPT can do and why it's worth
using. Best picks for you This article was correct as of February 2025. AI tools are updated regularly and it is possible that some features have changed since this article was written. Some features may also only be available in certain countries. (Image credit: Shutterstock/Daniel Chetroni)When it launched in November 2022, ChatGPT signalled a
new era for artificial intelligence. Developed by OpenAI, the AI chatbot became a hugely popular tool almost overnight. Much of the appeal of ChatGPT lies in its use of natural language. Built on Large Language Models, it's able to understand human queries written as plain text prompts and generate conversational responses. In March 2023, OpenAI
announced GPT-4, the latest version of its language model. This iteration is multimodal, meaning it can process text, images and audio. Apps running on GPT-4, including ChatGPT, are also better able to process the context of queries,
with answers rendered quickly and accessibly. Sign up for breaking news, reviews, opinion, top tech deals, and more. What can be phrased and answered using written words can be addressed - or at least attempted - by
ChatGPT. Its remit can be summarized as language instructions or troubleshoot existing code. It can write a wedding speech for you or re-write your draft in a way that flows better. It can create personalized workout
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plans, generate business ideas and even act as your therapist. The introduction of ChatGPT search unlocks the ability for users to get a summary of answers to a specific query sourced from the web, while integration of OpenAl's DALL-E 3 text-to-imager model me he insact the chatGPT for?As powerful as it is, ChatGPT spowerful as it is, ChatGPT so while integration of OpenAl's approach along the miss these What can't you use ChatGPT spowerful as it is, ChatGPT is along subject to a number of guidelines and ethical restrictions. The Al chatbot tries its best to avoid explicit, violent or discussions, nor will it offer legal, medical or financial advice on an individual basis. OpenAl' along the preal-time data from the web. Hitting the denotions. Nor will it promote anything relating to self-harm. How much does ChatGPT ear along with real emotions. Nor will it promote anything relating to self-harm. How much does ChatGPT as a data from the web. Hitting the "Reasons' button on a quality gives you limited access to the ChatGPT of 1 model, You get a limited number of images from DALL-E. 148(39) per month and unlocks and the web. Hitting access to multiple access to Span. OpenAl's OpenAl's open additional feed and the web. Hitting access to multiple access to Span. OpenAl's open additional feed access to Span. OpenAl's video generation model, as well as more images with DALL-E. The Pro tier will set you back a much more significant \$2,00 (about £16 / AU\$3.25) per month. Designed for advanced users, it unlocks deep access for generating Al video. The Team option is priced at \$25 (about £19 / AU\$3.8) per user per month and unlocks of the promoted and share custom GPAL-E. The Pro tier will set where can you use ChatGPT search to the text input field. (Image credit: Future) is ChatGPT as seal, including unlimited access to the latest the was the only way to use the chatbot. However, you can now download official ioS and Android apps for free, as well as a desktop app for macOS and Windows. The interface and features are ho

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