



INTEGRAL UNIVERSITY
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TECH DOSE



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1

Data of 200 million twitter users leaked

Hackers stole the email addresses of more than 200 million Twitter users and posted them on an online hacking forum, a security researcher said on Wednesday, 4 January 2023. The breach "will unfortunately lead to a lot of hacking, targeted phishing and doxing", Alon Gal, co-founder of Israeli cybersecurity monitoring firm Hudson Rock, wrote on LinkedIn. He called it "one of the most significant leaks I've seen". Twitter has taken to investigate or remediate the issue. Reuters could not independently verify if the data on the forum was authentic and came from Twitter. Screenshots of the hacker forum, where the data appeared and have circulated online.



3

PM Modi unveils 6G test bed, industry hails move

After a successful 5G rollout in the country, Prime Minister Narendra Modi on Wednesday announced the Bharat 6G vision document and launched the 6G research and development (R&D) test bed.

Inaugurating the new International Telecommunication Union (ITU) area office and innovation centre during a programme at Vigyan Bhawan here, he said that the 6G R&D test bed will help faster adoption of the new technology in the country. The government said that the Bharat 6G vision document and 6G test bed will provide an enabling environment for innovation, capacity building, and faster technology adoption in the country.

The industry hailed the PM's move to roll out the 6G test bed in the country. "6G holds the possibility to provide extreme speeds with predictably low latency and a low jitter rate for high demanding scenarios and about 10Cr active 6G devices by 2030," said Arvind Bali, CEO, Telecom Sector Skill Council (TSSC). "By providing a platform for academic research, industry, and startups, the 6G Test Bed can pave the way for the development of skilled and innovative workforce," he added. In August last year, PM Modi had said that the government is preparing to launch 6G by the end of this decade.



Indian government blocked 232 Betting and Loan apps that are linked to China and other countries

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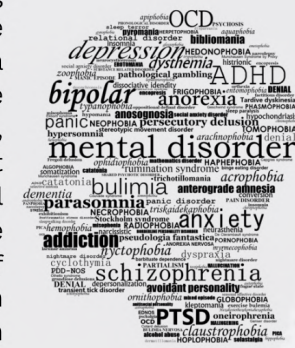
The government has blocked 232 apps operated by overseas entities, including Chinese for being involved in betting, gambling and unauthorized loan service. Ministry of Electronics and IT (MeitY) has issued orders to block these apps following instructions from Ministry of Home Affairs. The order to block 138 apps that were involved in betting, gambling and money laundering were issued last evening. Separately, an order to block 94 apps engaged in unauthorised loan service has also been issued. They were posing a threat to the economic stability of the country.



Model created using AI and tweets to help early detection of mental disorders

4

Work is underway to create anxiety and depression prediction models, using artificial intelligence (AI) and Twitter, one of the world's largest social media platforms that could detect signs of these illnesses before clinical diagnosis, according to researchers. Researchers at the University of São Paulo (USP) in Brazil said that preliminary findings from the model suggested the possibility of detecting the likelihood of a person developing depression based solely on their social media friends and followers.



5

A camera without lens ? Paragraphica generates images using location data & AI

Introducing Paragraphica, the world's first context-to-image camera that visualises a photo based on location data and AI. The camera comes as a physical unit and a virtual camera that users can try. According to the official website, the camera works by collecting location data with the help of open APIs (application programming interfaces). It uses information such as time of the day, address, weather, and places in the vicinity. Paragraphica writes a paragraph based on the combination of all these details.



8

Scientists employ AI to predict brain cancer outcomes

Stanford Medicine researchers have created an AI model to evaluate stained images of glioblastoma tissue. This model predicts tumor aggressiveness, identifies genetic characteristics, and assesses post-surgery cancerous cell presence, aiding in the treatment of this aggressive brain cancer with a typically short life expectancy. The AI analyzes histology images, which are dyed disease tissue pictures, to provide valuable insights for doctors and scientists.



AI Supercomputer 'AIRAWAT' puts India among top supercomputing league

6



The International Supercomputing Conference (ISC 2023) in Germany, the AI Supercomputer 'AIRAWAT', situated at C-DAC, Pune, achieved an impressive global ranking of 75th on the esteemed Top 500 Global Supercomputing List. This accomplishment establishes India as a leading nation in the field of AI supercomputing. 'AIRAWAT' is part of the Government of India's National Program on AI and represents a significant stride forward in the country's AI capabilities.

Future of Air Travel: Joby Aviation's Air Taxi Milestone

9



Joby Aviation, an air taxi start-up, sent its aircraft to Edwards Air Force Base in Southern California for the first supersonic flight. Air taxis work like helicopters but also have wings to fly like planes. NASA will test the Joby aircraft, looking at air traffic, flights, and infrastructure from 2024. The goal is to plan how future air transportation systems will work together.

7

First US Robotic Liver Transplant: A Medical Milestone!

A surgical team from Washington University School of Medicine in St. Louis achieved a remarkable milestone by performing the first-ever robotic liver transplant in the United States. This groundbreaking procedure, carried out at Barnes-Jewish Hospital, brings the advantages of minimally invasive robotic surgery to liver transplants, offering promising benefits for future patients in need of this life-saving procedure.



10

ISRO Successfully Launches Gaganyaan Test Flight Abort Mission

ISRO Chairman S Somanath confirmed the success of the 'TV-D1' in the Gaganyaan Mission, following a second launch attempt due to an initial engine ignition issue. The mission aimed to demonstrate the crew escape system for the Gaganyaan program, which performed effectively. The crew module separated safely from the vehicle and touched down at sea, achieving its objectives.



11

Amazon's Palm Tech Goes Beyond Payments

Originally for cashier-free payments, Amazon's palm scanning tech now shifts focus to office security. Rebranded as Amazon One Enterprise, it's tailored for workplaces. Employees can use this biometric system to access buildings, computers, and sensitive information by scanning their palm. This move extends the tech's reach from grocery stores to corporate offices for enhanced security and access control.



14

India's Aditya-L1 Solar Probe Launches Toward the Sun

India has successfully launched its first space-based solar observatory mission – just 10 days after the landing of its spacecraft Chandrayaan-3 on the lunar south pole.

India's space agency, the Indian Space Research Organization (ISRO), has installed seven payloads on the Aditya-L1 spacecraft, four for remote sensing and three for on-site experiments.



Meta's Threads: From Boom to Search for New Users

12



Meta's Threads experienced a remarkable surge, with over 100 million users joining within just 5 days of its launch. However, this initial momentum has decreased, and the platform now faces challenges in attracting new users. Principal Analyst at Insider Intelligence, suggests that Threads cannot solely rely on Twitter defectors (users switching from X to Threads) to drive continued growth.

13

4-British School Employs AI Robot As Principal Headteacher For Enhanced Decision-Making

Artificial intelligence is taking over many jobs by automating tasks that were once done by humans. This is happening in a variety of industries, including manufacturing, customer service, healthcare, and transportation. In a surprising move, a preparatory school in the United Kingdom has named an AI robot as its "principal headteacher." Cottessmore School, located in West Sussex, collaborated with an artificial intelligence developer to design Abigail Bailey, the robot, with the purpose of assisting the school's headmaster.



Companies paying up to 1.5 crore to ChatGPT experts

15

A Business Insider report also says that companies on LinkedIn are willing to pay up to USD 185,000 (around Rs 1.5 crore) per year to people having expertise in the use of ChatGPT.



For instance, Recruiting from Scratch, an HR company based in the US, is hiring for the position of Senior Machine Learning Engineer, Audio and the skills required for the job include 'Familiarity with current AI tools and platforms - ChatGPT, Midjourney and others'.

AI Changed the Internet in 2023



Pushed “DEEPPFAKES” into the mainstream

Deepfakes, or media that's been altered by AI to seem real, have been a concern for some time. But this year, the widespread availability of generative AI tools made it easier than ever to conjure up realistic images, videos, and audio. OpenAI, Google Bard and Meta's Imagine are all examples of models that use generative AI to create images from text prompts.

Gave “HALLUCINATION” a new meaning unrelated to drugs

This was the year everyone learned computers could hallucinate, too — just not in a fun or transcendental sort of way. Hallucination is when generative AI confidently fabricates its responses, giving it the illusion of believing something that isn't true. AI hallucinations often make sense linguistically, and sometimes contain elements of reality.



Introduced us to AI-GENERATED content

One of generative AI's amazing capabilities is writing natural-sounding language. Currently, most AI-generated content reads like that of a high school student that didn't do all the reading — prone to inaccuracies and slightly robotic. But with time, LLMs are getting better, making the automation of articles, press releases, job listings, and creative works.

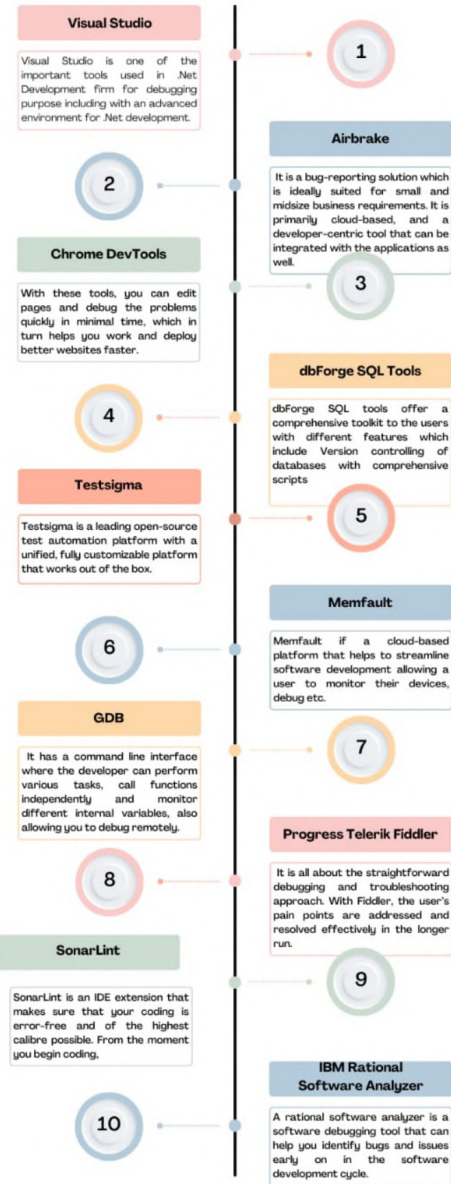


Raised the alarm about TRAINING DATA

How did LLMs get so good? They're trained on the entirety of the internet. Everything — Reddit posts, social media posts, Wikipedia pages, hundreds of thousands of pirated books, news sites, academic papers, YouTube subtitles, food blogs, memes — feeds the AI models' insatiable appetites.



POPULAR DEBUGGING TOOLS OF 2023



TOP MOST TECHNOLOGY TRENDS IN 2023

1 ARTIFICIAL INTELLIGENCE

Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems.

1

2

2 METAVERSE

The metaverse is a loosely defined term referring to three-dimensional virtual worlds in which users represented by avatars interact.

3

3 BLOCKCHAIN

Blockchain technology is an advanced database mechanism that allows transparent information sharing within a business network.

4

4 QUANTUM COMPUTING

A quantum computer is a computer that takes advantage of quantum mechanical phenomena.

5

5 CYBER SECURITY

Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks.

6

6 CLOUD COMPUTING

Cloud computing applications used by both businesses and individuals.

7

7 DATAFICATION

Datafication is turning various facets of your life into digital data.

8

8 HYPERAUTOMATION

Hyperautomation aims for end-to-end automation across all processes, workflows, systems, bots, and tools.

9

9 GREEN COMPUTING

Green computing, green IT, or ICT sustainability, is the study and practice of environmentally sustainable computing.

10

10 IOT(InternetofThings)

The internet of things is a technology that allows us to add a device to an inert object.

11

11 SUSTAINABLE TECHNOLOGY

It is an umbrella term that describes innovation that considers natural resources technology.

12

12 5G NETWORKS

5G is the fifth-generation technology standard for cellular networks.

10 MOST POPULAR CODING LANGUAGE OF 2023

