INTEGRAL UNIVERSITY
LUCKNOW - INDIA

A+

SUSTAINABLE DEVELOPMENT GOALS

DEPARTMENT OF COMPUTER APPLICATION
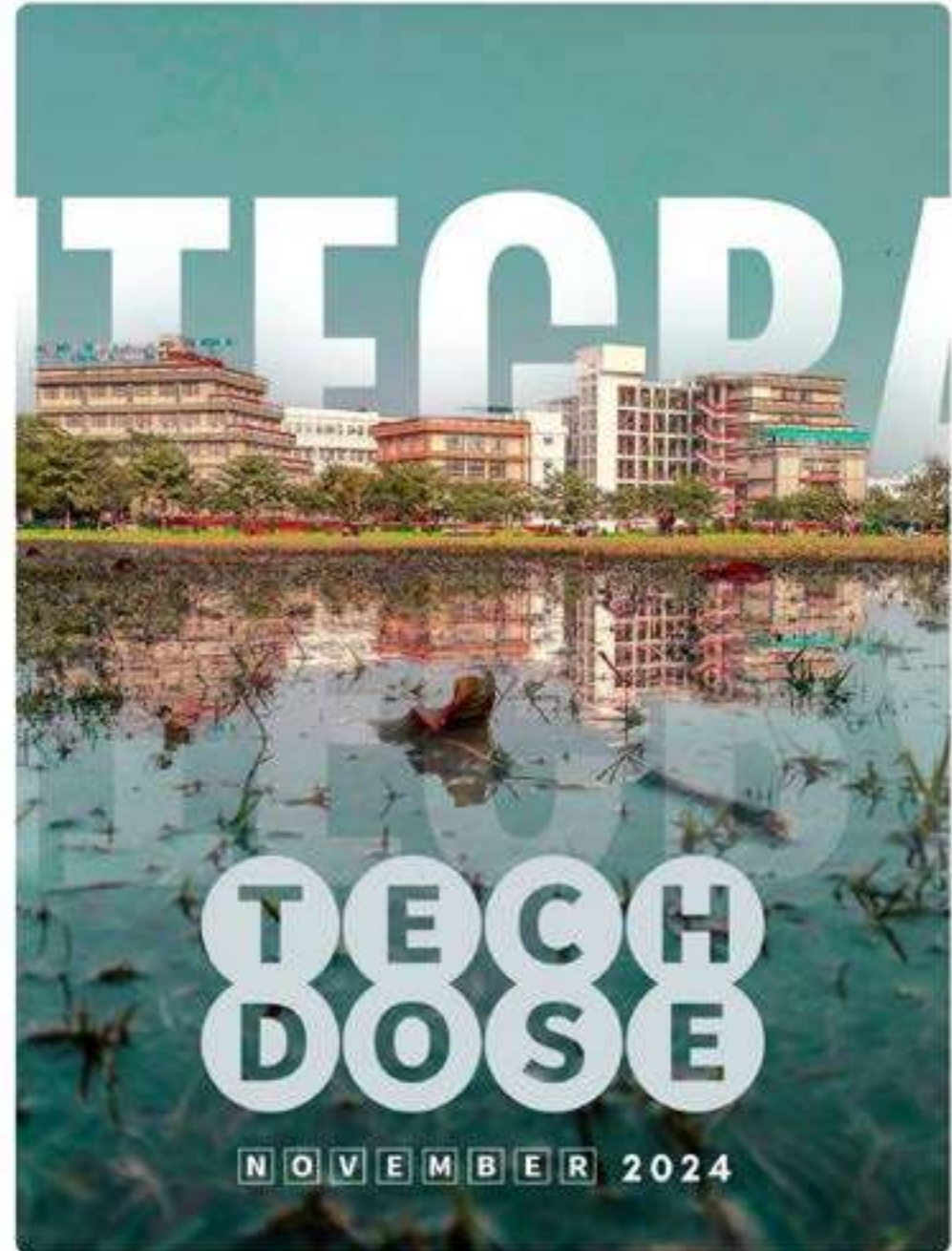
TECH DOSE

NOVEMBER 2024

TECHNICAL COMMITTEE

1 'World-first' AI camera targets drinkdrivers

Motorists under the inuence of alcohol or drugs could be caught by a pioneering AI camera which is being tested for the rst time in Devon and Cornwall. The state-of-the-art Heads-Up machine can detect road use and behaviour consistent with drivers who may be impaired by drink or drugs. Police further up the road can stop the vehicle, talk to the driver and do a roadside test for alcohol and illegal drugs. Geo Collins, UK general manager of camera developer Acusensus, said: "We are delighted to be conducting the world's rst trials of this technology right here in Devon and Cornwall."

https://www.livemint.com/technology

3 Social media given 'last chance' to tackle illegal posts

Under the UK's Online Safety Act (OSA), online platforms are required to assess whether their services expose users to illegal content by 16 March 2025. Failure to carry out these assessments could result in fines of up to 10% of a platform's global turnover. Ofcom, the regulator enforcing the law, has published its final codes of practice, outlining how platforms should handle illegal online material. Platforms must conduct risk assessments to identify where and how illegal content, such as child sexual abuse material (CSAM), coercive behavior, extreme sexual violence, and content promoting suicide or self-harm, may appear on their services. They must also implement measures to prevent this content from reaching users. Ofcom's head, Dame Melanie Dawes, warned that this is the "last chance" for the industry to make necessary changes, and failure to comply will lead to enforcement actions starting in March 2025.

https://www.bbc.com

'Digital twins' could speed up drug discovery   2

The heart in front of me beats and moves like a human organ, but has no blood owing through it, nor does it live in a human body. It's a computer-generated heart, or digital twin, used to test implantable cardiovascular devices, like stents, and prosthetic valves that, once conrmed they are safe, will eventually be used on real people. But the heart's creators, Adsilico, have gone beyond just creating one accurate model. Using articial intelligence and huge amounts of data, they have created multiple dierent hearts. These AI-generated synthetic hearts can be made to reect not just biological attributes like weight, age, gender and blood pressure, but health conditions and ethnic backgrounds. As these dierences often aren't represented in clinical data, digital twin hearts can help device manufacturers conduct trials across more diverse populations than they could with human trials, or trials involving just digital twins without AI. "This allows us to capture the full diversity of patient anatomies and physiological responses, which is not possible using conventional methods. This use of AI to enhance device testing leads to the development of devices that are more inclusive and safer," says Adsilico chief executive Sheena Macpherson.

https://www.xtelsent/

Hospitals to use AI to cut patient visits   4

An NHS trust hopes to use articial intelligence (AI) technology to improve a scheme that helps patients across Hull and East Yorkshire with chronic respiratory illness. The Lenus chronic obstructive pulmonary disease (COPD) support system sees patients use an app to keep track of their symptoms. The Humber Health Partnership said there had been a 40% reduction in the number of patients needing to go back to hospital for treatment since the system was launched in March 2023. It hopes to reduce the gure even further - possibly by as much as 90% - by using AI technology to analyse the data from the app.

https://thischord.com/

5 Controversial chatbot's safety measures 'a sticking plaster'

Chatbot platform Character.ai is overhauling the way it works for teenagers, promising it will become a "safe" space with added controls for parents. The site is facing two lawsuits in the US – one over the death of a teenager – and has been branded a "clear and present danger" to young people. It says safety will now be "infused" in all it does through new features which will tell parents how their child is using the platform – including how much time they're spending talking to chatbots and the ones they speak to the most. The platform – which allows users to create digital personalities they can interact with – will get its "rst iteration" of parental controls by the end of March 2025.

https://www.lyanmm.com/technology

8 With us, you can earn up to $10,000 a month by investing as low as $200 in Amazon CFD's shares

Advantages of the Amazon CFD's Platform

The platform is easy to use and accessible to everyone with simple registration. It requires no economic expertise—just 10 minutes to learn and start investing. The algorithm handles all operations automatically, with minimal risk and 98% of transactions closing in your favor, generating income. Developed by top programmers, it ensures high security and protection for users.

https://indianexpress.com/ar/ce/technology/tech-hews-technology/bitcoin-icon-amount-free-service-including-user-booking-source-860306

Google Drive's Document Scanner Updated With Auto Enhancement Feature on Android 6

Google Drive's mobile document scanner tool has been upgraded with a new feature dubbed 'auto enhancements'. It can automatically enhance the resolution and image quality of a digitised document to improve its readability. The new auto enhancement feature on Google Drive can x a number of issues in a scanned document including white balance, shadows, lighting, and contrast. While it was announced for Google Workspace users, the feature will also be available to personal Google account holders.

https://www.bbc.com/

Samsung Galaxy M16 5G, Galaxy F16 5G Reportedly Spotted on BIS Suggesting Imminent India Launch 9

Samsung Galaxy M16 5G and Galaxy F16 5G handsets could be launched in India soon. The names of the purported budget smartphones had previously surfaced on a certication site. Now, the phones have reportedly been spotted on a particular certication website in India, suggesting an imminent India launch. The Samsung Galaxy M16 5G could come with specications similar to the Galaxy A16 5G, which was launched in India in October. The Galaxy M16 5G and Galaxy F16 5G are expected to succeed the Galaxy M15 5G and Galaxy F15 5G, respectively.

https://www.bbc.com/

7 India Blockchain Alliance Partners With RAK-DAO to Promote Cooperation in Web3

Web3 rms in India will be able to tap into UAE's more regulated Web3 ecosystem. India's Web3-focussed non-government groups are stepping up eorts to establish international partnerships. On Monday, the India Blockchain Alliance (IBA) announced a partnership with UAE's free zone for Web3 rms – the Ras Al-Khaimah Digital Assets Oasis (RAK-DAO). The aim of this alliance, is to take collaborations on Web3-related education, research, and development initiatives to the global stage, according to the IBA. This collaboration is expected to catalyse Web3 entrepreneurship while also expanding awareness around blockchain use cases.

https://onlineexpress.com/article/technology/tech-news-technology/between-one-a-7-aunch-2025-alexo-a15-launch-features-in-shares-860306

10 YouTube Opens Its Health Content Shelves to Registered Health Professionals

YouTube is expanding one of its health-related initiatives to allow varied content creators to spread awareness about dierent topics and diseases. Last week, the video streaming platform announced it was opening up 'health content shelves' and 'health source information panels', two exclusive features reserved for accredited health organisations, to registered doctors, nurses, and other health professionals who make content on the platform. The company highlighted that it intends to make it easier for people to nd high-quality information about health and wellness.

http://www.enet.co.in

11 — OpenAI Rolling Out Projects in ChatGPT, a New Feature That Takes on Google's NotebookLM

OpenAI rolled out a new articial intelligence (AI) feature for ChatGPT on Friday. The new feature, dubbed Projects in ChatGPT or just Projects, allows users to create specic chat folders where they can ask questions about the same topic or about topics with the same context. With the ability to add les in Projects, the feature is similar to Google's NotebookLM. The AI rm highlighted that while the paid subscribers of the chatbot will get the feature in the next few days, Edu and Enterprise users will get it by January 2025.

https://www.wired.com/

HDMI 2.2 Standard With Improved Bandwidth to Be Unveiled at CES 2025: Report — 12

New HDMI specication will reportedly enable a variety of higher resolutions and refresh rates. A new HDMI standard is likely to be unveiled ahead of the Consumer Electronic Show (CES) next year. The HDMI Licensing Administrator is reportedly planning to announce the new HDMI specication, expected to be named HDMI 2.2, in the rst week of January in Las Vegas ahead of the ocial start of CES 2025. The HDMI 2.2 is likely to oer higher bandwidth capacity and support for higher resolutions than HDMI 2.1, which was launched in 2017 with up to 48Gbps bandwidth. A new cable may be required to take advantage of the new capabilities.

https://www.wired.com/

13 — .Bitcoin tops $106,000, hopes grow for strategic reserve

- Bitcoin hits record high amid Trump's pro-crypto stance
- Price up over 50% since Nov US election
- Bitcoin buyer MicroStrategy joins Nasdaq 100

Dec 16 (Reuters) - Bitcoin hit a record high above $106,000 on Monday after President-elect Donald Trump suggested he plans to create a U.S. bitcoin strategic reserve similar to its strategic oil reserve, stoking the enthusiasm of crypto bulls. Bitcoin , the world's biggest and best known cryptocurrency, hit a high of $106,533 and last traded up 2.6% at $103,917 at 1215 GMT. Smaller crypto ether was up 0.4% at $3,918.

14 — Meta's Motivo AI Model Could Deliver More Lifelike Digital Avatars: Here's How it Works

Meta has introduced Motivo, a "first-of-its-kind" behavioral foundation model designed to enhance the metaverse experience by controlling the movements of digital avatars. The AI model enables avatars to perform complex, whole-body tasks and improves virtual physics interactions. Using unsupervised reinforcement learning, Motivo can adapt to complex environments and learn human-like behaviors without supervision. A novel algorithm, trained on an unlabelled motion dataset, gives Motivo zero-shot inference capabilities, making it a key innovation for Web3 applications and the metaverse.

Windows 'God Mode,' access it on a Windows 10 or Windows 11 PC — 15

God Mode in Windows provides a quick and easy way to access a multitude of settings directly from the desktop. Here's how you can enable it. It enables you to access these settings directly on your desktop, making them more accessible without navigating through multiple menus. All in all, it is a quick and ecient way to access most of the settings available in Windows. You can enable God Mode on both Windows 10 and Windows 11.

How to Enable God Mode on Your Windows 10 or 11 PC:

Step 1: Right-click on your desktop.
Step 2: Navigate to New and select Folder to create a new folder.
Step 3: Rename the folder with the following text: GodMode.{ED7BA470-8E54- 465E-825C-99712043E01C}

Once you rename the folder, you'll notice that the folder icon automatically transforms into a new icon, indicating a control panel.

"Problems of billions of years" will be solved in 5 minutes by this Willow chip

The scientists of the renowned tech company Google has announced to invent the world's fastest quantum chip. They have named the chip "**Willow**"

Google claims that this chip has solved a problem in 5 minutes that would have taken world's fastest supercomputer about 10 septillion years to solve. Here, septillion years represents twenty four zeroes after 10, which can also be written as 10,000,000,000,000,000,000,000,000,000 years. This time is even more than the age of the universe, which is about 13.8 billion years old. This is such an achievement, which was once believed to be impossible.

Google introduced the fastest quantum computing chip : Willow
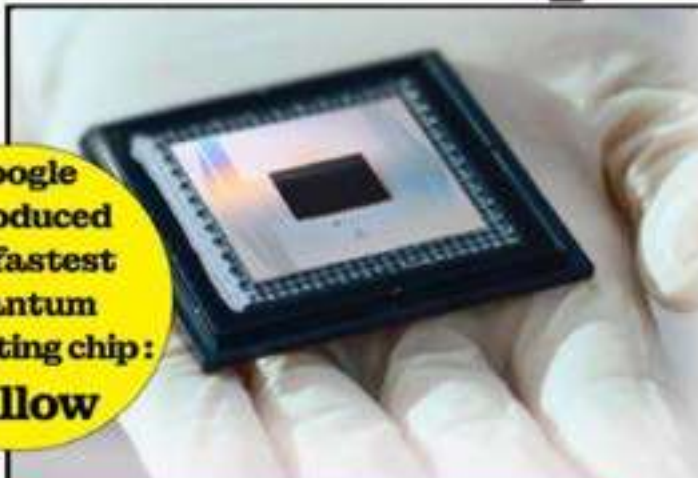
What is Quantum Computing?

Traditional computers process data in bits (0 or 1). Quantum computers, however, process data in qubits. Speciality of qubits is that it can process large amount of data at once. The more the qubits in the quantun computer, the better the speed and usefulness. Quantum computers can solve thousands of problems in a single stance.

Speciality of Willow: Earlier, increase in qubits led to increase in errors. However, after the introduction of "**willow**" errors will be fixed in real time. Willow's quantum error correction enables chip to perform big calculations without errors.

Where will be the chip used: This chip can be used in medicinal researches, nuclear reactors and battery designing. Medicines which took 20 years to make, now will take only about 2 years with the help of this chip.

Exploring the Role of Augmented Reality (AR)

WHAT IS AR?

Augmented Reality (AR) is a technology that can enhance the learning experience in higher education by helping students:
- Understand abstract concepts
- Improve their motivation and attention

KEY APPLICATIONS OF AR IN EDUCATION

1. Virtual Field Trips
- Students can explore history in a more engaging way by virtually visiting historical monuments and museums.

2. Explanatory Videos
- AR teaches complex concepts like chemical compounds and molecular structures through interactive videos and animations.

3. 3D Geometrical Shapes
- It allows students to visualize and manipulate 3D shapes, making geometry lessons easier to understand.

4. Presentations
- AR enhances presentations, making them immersive and in-depth.

5. Distance Learning
- Interactive AR-based classes enable effective distance learning opportunities.

BENEFITS OF USING AR IN HIGHER EDUCATION

1. Improved Motivation
- AR can boost student motivation and increase attention levels by nearly 30%.

2. Better Knowledge Retention
- Experiential learning through AR helps students retain knowledge more effectively.

3. Safe Learning Environment
- Students can practice and learn in a risk-free virtual environment.

4. Enhanced Classroom Interaction
- AR introduces new teaching methods, encouraging better interaction in classrooms.