



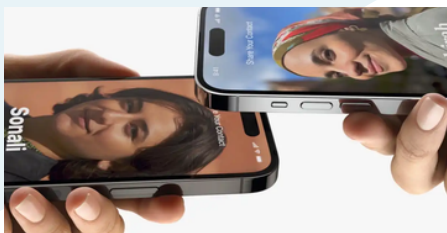
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## Everything New About Apple's iOS 17

At the WWDC presentation on June 5, 2023, Apple showcased a few of the new features arriving in iOS 17 this autumn. They consist of Live Voicemail, a brand-new app called Journal, and a new way to use Stickers.

NameDrop, a new feature of AirDrop, allows you to exchange contact information by bringing your iPhone close to another iPhone. This also works with the Apple Watch. When two iPhones are brought together, SharePlay is activated, allowing you to listen to music, view a movie, or play a game with another iPhone user, as well as transfer content. AirDrop will allow massive file transfers to be launched by two phones in close proximity later this year, with the transfer completed via iCloud.

Apple has also made the iOS 17 Developer Beta available to everyone. A \$99/year premium developer membership is no longer required.



## Robot 'Chef' Learns Recipes from Watching Videos



Robotic chefs have been taught how to follow recipes by watching cooking demonstration videos by University of Cambridge researchers. After watching a human demonstrate each meal in a video, the robot, which was programmed with a cookbook containing eight straightforward salad recipes, was able to recognise and reproduce the dishes.

After the researchers analysed the videos using computer vision techniques, the robot was able to distinguish the components, motions, and changes in the recipes. This was made possible by the robot's ability to recognise differences in the recipes.

The robot was 93% successful in correctly identifying the correct recipe, and it even created a brand-new recipe on its own. The study reveals how video information can instruct automated food production systems. The work was funded by Beko Plc and the Engineering and Physical Sciences Research Council (EPSRC).



## Samsung Galaxy Unpacked Event Confirmed For Late July

Samsung announced its Galaxy Unpacked event for late July. Samsung unveils its latest foldable phones, including the Galaxy Z Fold 5 and Galaxy Z Flip 5, at mid-year Galaxy Unpacked events.

The South Korean tech giant is anticipated to unveil the Galaxy Z Fold 5 and Galaxy Z Flip 5 smartphones this year.

In addition, Samsung may release its next-generation Galaxy Watch, which will include the Galaxy Watch 6 Pro and the Galaxy Watch 6, as well as the Galaxy Buds 3 Pro.

### Upcoming Events:

- World Conference on Science Engineering and Technology – 11 June
- Summer Food Carnival – 09 to 11 June

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## Quantum Computers Are Better Guessers, A new Study Reveals

In a bitstring guessing game, researchers from USC and IBM Quantum have obtained a quantum speedup advantage, advancing the Noisy Intermediate-Scale Quantum (NISQ) era. The group, led by Daniel Lidar and Bibek Pokharel, suppressed faults that are generally present at that scale to manage strings up to 26 bits long.

A fully operational quantum computer could identify a 26-bit string in the experiment with just one try, but a classical computer needed over 33 million guesses. To accomplish the quantum speedup, the researchers used a noise-suppression method known as dynamical decoupling. The work shows that quantum computers can run algorithms more quickly than classical computers when error correction is used properly.



## Chemical Found in Common Artificial Sweetener Can Damage DNA, Claims Study



A recent study conducted by experts from North Carolina State University has found that a chemical present in the popular artificial sweetener Splenda (sucralose) may be harmful to DNA and potentially lead to cancer. Sucralose, which is 600 times sweeter than table sugar, is extensively used in various products like baked goods, beverages, chewing gum, and frozen dairy desserts.

The research discovered that sucralose breaks down into a compound called sucralose-6-acetate, which can damage the intestinal lining and increase the expression of genes associated with inflammation, oxidative stress, and cancer.

Previous studies have also indicated that sucralose can cause intestinal damage. The manufacturers of artificial sweeteners, however, maintain that their products are safe.

## New Method Enhances 'Vision Transformer' AI System Efficiency

To solve issues with computing power and decision-making transparency in vision transformers (ViTs), researchers have created a new methodology dubbed "Patch-to-Cluster attention" (PaCa). ViTs are potent AI models that can recognise and classify items in photos. Significant obstacles are the complexity of transformer models and the difficulty of model interpretation.

By combining comparable portions of an image, the PaCa method leverages clustering algorithms to reduce processing needs. This sharpens the attention on specific objects and speeds up the procedure. By looking at the features that were utilised to create the clusters, clustering also makes models easier to understand. PaCa outperformed current ViTs in the categorization, identification, and segmentation of objects, the researchers discovered. PaCa will then be scaled up utilising bigger datasets.



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