



"This visual is human-created, AI-aided"

'clicking' drive or an undetectable device, the cost can rise to RM3,800. Pricing also depends on factors like storage capacity, brand, and device model.

Some complex cases may require sending the device to countries like Singapore, India, or South Korea, which can further increase the cost.

"Customers usually compare prices among service providers. In most cases, they agree to the cost because they value the data," he said.

With the recent memory crunch causing devices like hard drives to become more expensive, Asyraf believes consumers still have alternatives for extra backups or storage, such as cloud services, which come at a wide range of price points.

"Even though hardware costs have risen, there's really no reason not to back up data, as cheaper, more flexible, and secure options are now available," he said, adding that cloud storage also reduces the risk of physical damage or loss.

**Check your backups**

In February, software engineer Wong Qi Lun noticed that his computer couldn't detect one of his disk drives. He spent a few days trying to rectify the issue before giving up.

"I concluded then it was a physical

issue, and there was nothing to be done short of sending it to a drive restoration expert," Wong said.

But the price of data recovery service may be costly, sharing that he has been told that it can start at around RM1,000. Plus, there is no guarantee that the data can be successfully retrieved.

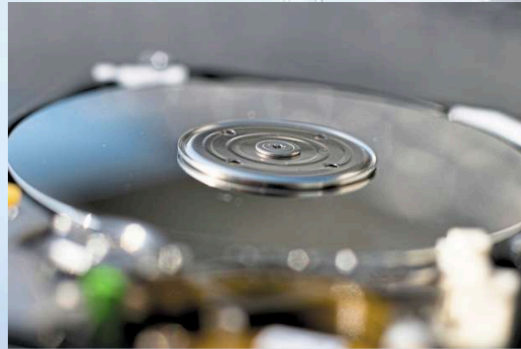
Wong thought he had lost about seven years worth of media such as images for art projects, videos and a music collection he had spent a significant amount of time curating.

"In short, I had lost an archive of media. It felt as though I had lost a history of what I listened to, read, watched, a history of the art, and work that made me who I was," he said.

Wong had uploaded some of his important content to online platforms utilising the free capacity, but it was not enough to cover the terabytes of data he had stored in the drive. Ultimately, he believed relying on an online provider would be more expensive, as it requires ongoing monthly subscription payments to maintain access to his storage.

Eventually, Wong chose to spend on two hard drives, setting up a mirrored configuration as a more cost-effective way to protect his data. This means everything he saves on one drive is automatically copied to a second drive, so if one fails, his data is still safe.

For World Backup Day, Chai advised



Generally, users are advised to follow the 3-2-1 rule for backups – three being the minimum number of copies for your data, two different local storage methods, and one offsite storage, usually in the cloud. – Unsplash

more users to consider having at least two backups. Customers often tell him that they didn't expect to lose their data so easily.

"Whether it's a physical backup or stored online, it doesn't matter. Most customers don't realise they need more than one until it's too late. The key is to just get started," he said.

Asyraf too emphasised the need for greater awareness about regular backups.

"Customers usually come when their data can no longer be recovered completely. Backups should be done before problems arise, not after," he said.

He noted that the main problem isn't

with the technology, but users' tendency to depend on a single device. He recommends using a combination of backup methods, such as cloud and external drives.

"Set up an automatic backup system to sync your files; otherwise, you'll never get around to doing it. I also want to remind people that your data is more important than your device. Most users love their gadgets but take data backups lightly.

"The truth is, the device is replaceable, but you can't say the same about the data. If the data is important, always keep more than one copy," he concluded.

# Can online videos help robots learn household chores?

By KARL HILLE

WHAT'S the difference between a Roomba and *The Jetsons* robot maid, Rosie? It's not a joke, it's a challenge University of Maryland doctoral student Seungjae "Jay" Lee is tackling in hopes of training real-world domestic robots to master housekeeping tasks.

His work focuses on incorporating the vast reservoir of web videos to train robots by having them watch human activity.

"People often focus on designing better model architectures, but for artificial intelligence that integrates AI algorithms into physical systems, the real bottleneck is the dataset itself," Lee said in a story on the *Maryland Today* website.

Training robots to perform physical tasks is much more complicated than training artificial intelligence to write a paper. Not only does the robot need to manoeuvre and manipulate household



Robots require tactile feedback, sensor readings and action trajectories collected from real-world settings. – Pixabay

objects in three dimensions across possibly messy environments, but data on things like grip strength and technique are critically limited, Lee said.

Robots require tactile feedback, sensor readings and action trajectories

collected from real-world settings. Gathering this data is slow, expensive and technically demanding.

A Georgia Tech doctoral student is using first-person videos created in his lab to train robots.

Simar Kareer recorded himself repeatedly folding a shirt and doing other tasks while wearing virtual reality headsets.

Then, he constructed a humanoid robot with pincers for hands and attached the headset to the top to mimic a first-person viewpoint. If enough people use virtual reality headsets while performing their routine tasks, a virtual household chore dataset will emerge, he said.

Lee thinks the dataset may already exist in publicly available videos.

He is leading the development of TraceGen, a system that mines hundreds of thousands of publicly available videos from large datasets and platforms such as YouTube to extract useful hand and object motion.

Another project he is involved with, "Imagine, Verify, Execute", allows robots to explore the world and learn from their own explorations. – Baltimore Sun/Tribune News Service