

Introduction

Welcome to issue #39 of <u>The Big Reveal</u>, my innovation newsletter. You can also watch or listen on YouTube <u>here</u>.

Excited to announce I will be hosting and speaking at the Smart Workplace Summit 1st Feb., as well as hosting The Forum stage at ISE 2022 1st-4th Feb. in Barcelona. More info here.

Really enjoyed hosting <u>T-30</u> and speaking at <u>World Summit Al</u> in Amsterdam, delivering a keynote on the Risks of Al and XR at <u>InfoShare</u> in Gdansk, and delivering a remote keynote to investors in Asia on the metaverse for <u>Jefferies</u>.

Listen <u>here</u> to 'XR & the Future of Crypto' on the latest episode of my podcast, <u>XR Star</u>. Next episode is all about the future of AR glasses - subscribe on <u>Spotify</u> so you don't miss out.

Also you might enjoy my brief interview with Polish TV here.

Be in touch if you'd like to collaborate.

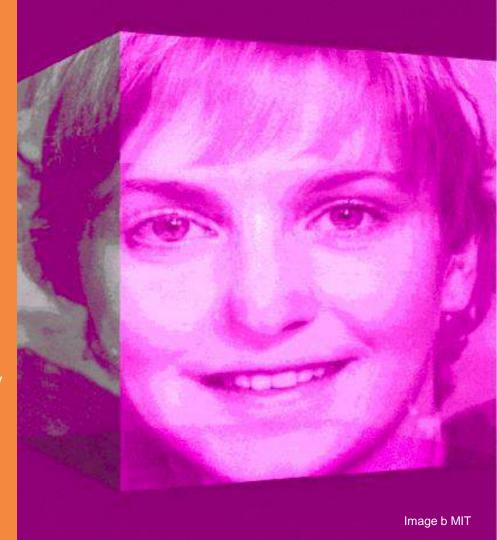
Wishing you all the best!

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Dataset Detection

'Explainability' is a challenge when it comes to AI - as in being able to explain how an algorithm came to certain conclusions. Using a cyber attack method called 'a membership attack', researchers have been able to 'rewind' deepfakes to reveal the real faces they trained on (thus providing explainability). Used viciously, however, this technique could reveal personal data. For instance, if a person's medical data was used to train a model associated with a disease this might reveal that person has that disease.



02 Varjo Aero

Varjo's recently released headset, Aero, is a step forward in resolution and fidelity, setting new standards. As <u>RoadtoVR</u>'s review puts is: "Looking through the lenses of Varjo Aero feels like looking at the world with new eyes." It's unique for the highest resolution on the market: 2,880 x 2,720 (7.8MP) resolution (beating both Vive Pro 2 and Reverb G2). This increases the feeling of presence and offers a large 'sweet spot'. While most gaming content isn't yet advanced enough to do this headset justice, industries such as aerospace will benefit greatly. It also offers collaborative software, Varjo Teleport VR.



03 Microflyer

This winged microchip developed by researchers at Northwestern University is the world's smallest human-made flying structure and is ideal for monitoring air pollution and airborne disease. Comparable in size to a grain of sand, it doesn't use a motor or engine to fly, but instead replicates nature's propeller seeds, catching flight on the wind by spinning like a helicopter, falling at a slow velocity in a controlled manner. They can also be equipped with sensors, power sources, antennas for wireless communication, and embedded memory to store data.



04 Scripter

Attaching to your shirt or collar like a badge, the Scripter turns what you hear and say into text transcripts without having to get your phone out. For students, teachers, authors, scriptwriters, journalists, or anyone who wants to document conversations or meetings, the Scripter instantly turns voices into paragraphs of text without the need for a keyboard, or worrying about typos. It also works seamlessly across 16 languages. Available to preorder now on Kickstarter for \$129 to be delivered in April 2022.



05 Positive Carbon

According to The United Nations, reducing food waste is the single most effective thing we can do to reduce CO2. Aimed at the hotel industry and businesses with large kitchens, Positive Carbon uses technology to help cut food waste by up to 50%. Fitting a scale under a bin alongside a camera that looks directly into the bin, chefs can identify exactly what is being thrown away so they can make better purchasing decisions.



Website.

06 BeFC

Button or coin cell power sources used in disposable low-powered electronics, such as sensors, medical wearables, smart-packaging, or single-use devices, are difficult to recycle and toxic to the environment. BeFC provides an alternative sustainable energy source made with paper and enzymes. This ultra-thin, flexible, and miniature bioenzymatic fuel cell system uses biological catalysts instead of chemical or expensive noble metal catalysts to convert natural substrates (such as glucose and oxygen) into electricity. This approach could not only replace batteries with a eco-friendly solution, but also open up new opportunities for IoT applications.

<u>Website.</u>



Musical QR

Campbell's has partnered with Universal Music Group on a series of specially marked soup cans that unlock songs and additional content. Scanning a QR code leads to recipes, behind-the-scenes content, and playlists that feature newly recorded and exclusive songs from UMG artists. From 15th Nov. customers can join in on the action, creating their own musical content via SoundsGoodTonight.com, creating their own songs via Campbell's-inspired sound kit for a chance to win \$20,000.



08 **Desk 27**

At this year's UC Expo and DT Expo held at the Excel earlier this month, I got to get hands-on with Google's forthcoming Desk 27. The Series One Desk 27 is a premium all-in-one touchscreen Google Meet device, desk monitor, and laptop docking station with Jamboard app capabilities providing a smart digital whiteboard. The 27-inch display has a 5-megapixel camera with 100° field of view, can zoom and pan to keep subjects in focus, and also has a privacy shutter. In addition, it has eight microphones that use Google's AI for getting rid of ambient noise. Priced at \$1,999 it is coming next month with preorders available now.



09 **XR VC**

SimplyVideo have made it easy for people to join Google Meets and Microsoft Teams meetings from AR and MR headsets. By preloading the SimplyVideo app onto a headset, people working remotely onsite or at home can scan a QR code sent in a meeting invite to be transported into a meeting. Supporting high security, cloud video interoperability, and low bandwidth calling, it also integrates with SketchFab for live 3D white-boarding and collaboration. A solution for remote inspections and remote experts, it works with headsets including RealWear, Rokid, Iristick, Magic Leap, HoloLens 2, and Vuzix, as well as anything with a camera and internet, such as underwater drones.





10 Cast

While I don't often cover the adult industry, I always look out for their innovations, as this industry often is ahead of mainstream trends. The latest trend to catch my eye pairs sensory devices with content, reacting in real-time to produce live physical sensation.

CamSoda's "Cast" series pairs connected (Lovense) sex toys with HBO series Succession, activating sensation everytime a certain actor is onscreen.

Previously they have paired devices to content such as the cryptocurrency market and the Super Bowl. As wearables become more sophisticated, everyday devices might offer use the ability to stay viscerally upto-date with our favourite people and news.



Thank you

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