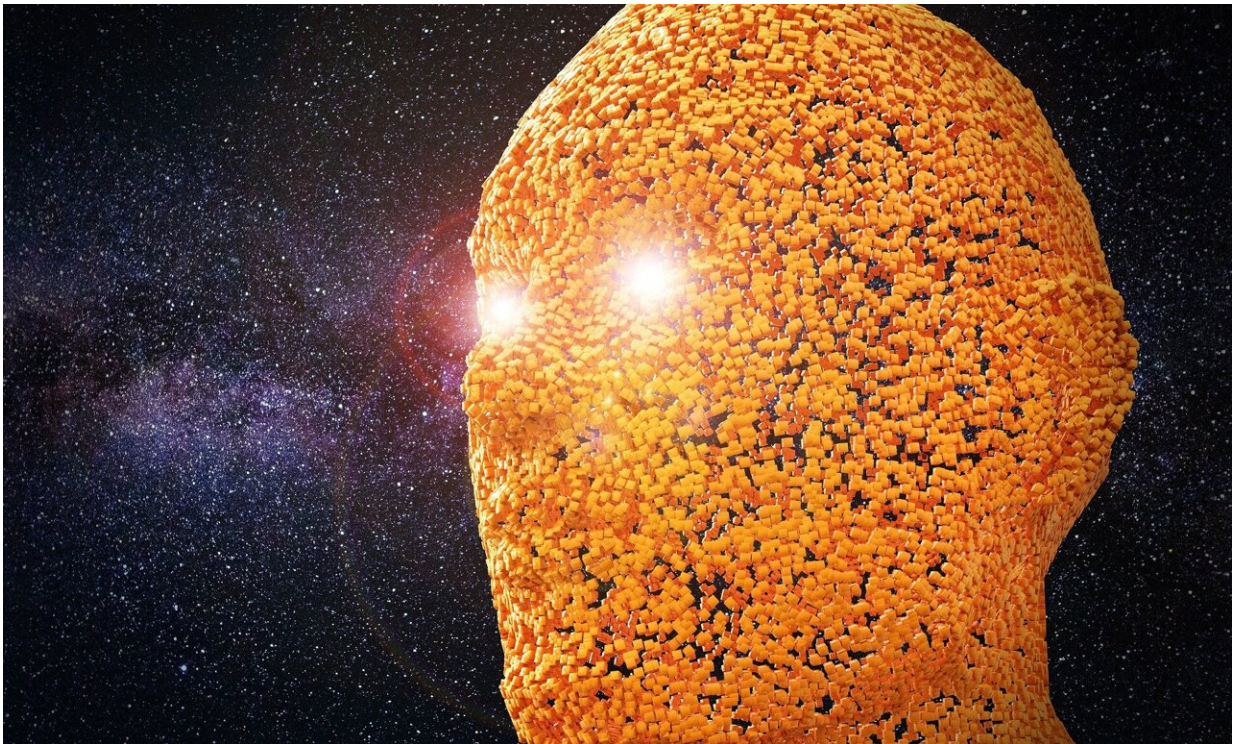# The metaverse poses 'terrifying dangers,' academic warns

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Credit: Pixabay/CC0 Public Domain

The metaverse poses 'terrifying dangers'—and we need to figure out how to police it now before it's too late, according to one leading expert.

The metaverse—an immersive virtual world connecting countless digital spaces—moved a step closer to reality when Facebook's Mark

Zuckerberg made it one of his key priorities last week.

While some critics are skeptical about just how revolutionary the metaverse might prove, Dr. David Reid—Professor of AI and Spatial Computing at Liverpool Hope University—is adamant it'll change all of our lives immeasurably, in the same way the Internet did.

Yet he also suggests that as well as providing great benefits it also poses 'terrifying dangers'.

And he's now calling for urgent conversations to begin concerning how to protect metaverse users—before the technology becomes a reality in the next five to ten years.

Professor Reid, of Hope's Department of Mathematics, Computer Science and Engineering, argues that "the metaverse has huge implications—it comes with fantastic advantages and terrifying dangers."

"And we need a highly robust system in place to police the metaverse. We're clearly in the very early stages but we need to start talking about these problems now before we go down a route we can't reverse away from. It's crucial for the future."

The risks posed by the metaverse, according to Professor Reid, center on overall control as well as the gathering and protection of data.

Professor Reid says that "people have been talking about how the rise of Artificial Intelligence (AI) will significantly change society and everything we do. And that's true. But the metaverse is at least as big, if not bigger, than the rise of AI."

"Because if you think about the way it works, the metaverse's ultimate

aim is not just virtual reality, or augmented reality, it's mixed reality (MR). It's blending the digital and the real world together. Ultimately this blend may be so good, and so pervasive, that the virtual and the real become indistinguishable."

"And the market for that is gigantic. Whoever controls it, will basically have control over your entire reality."

"Many current MR prototype systems have face, eye, body and hand tracking tech. Most have sophisticated cameras. Some even incorporate Electroencephalogram (EEG) technology in order to pick up brainwave patterns. In other words everything you say, manipulate, look at, or even think about can be monitored in MR. The data this will generate will be vast…..and extremely valuable.:

"And that's why we need a system in place to police it. No single company should ever exert control—it's simply too important for that to happen."

"It has to be a collaboration, using open standard protocols, where a standard is freely available to be adopted and shared by others, in the same way that the World Wide Web (WWW) has evolved."

Professor Reid points to the fact that the Internet has the World Wide Web Consortium (W3C), influenced by Web founder Sir Tim Berners-Lee's attitude of openness. The metaverse, Professor Reid claims, needs its own dedicated equivalent—and it needs one in a hurry.

He warns that "the W3C encourages participation, the sharing of knowledge, and thereby it builds trust on a global scale. This influences the way the Internet functions. It's not a business, it's not a government, it's an independent organization that takes care of standards."

"The metaverse needs the equivalent of the W3C and these conversations need to happen right now—because every single tech company I know of sees this as part of its future."

Acting now also gives the world a fighting chance of getting to grips with security risks in the metaverse, as well as the threat of bullying or social media pile-ons in this mixed reality universe.

Professor Reid adds that "If you think about the amount of data a company could collect on the WWW right now, compared to what it could collect with the metaverse, there is just no comparison."

"But consider this; If you have your avatar in the virtual world, do you own it? Do you really own the way you look? Could you hijack someone's avatar and appear as someone else? How do you know you're really talking to the person you think you're talking to?"

"It happens now on the internet and the threat will be much greater with the metaverse. You'll be able to own things and have possessions in the metaverse—how do you protect them?"

"People are worried about the influence that Twitter can have on politics right now. But in a completely immersive environment, how much more influence can you have on someone, when you can transport someone to a war zone and show them precisely what's going on?"

"Likewise, how much more dangerous might social media pile-ons, or online bullying, become in the metaverse? I'd argue it has the potential to be far, far more extreme. The visceral experience of immersion can be exceptionally emotive."

There's better news for industry—as Professor Reid suspects the metaverse might be a huge shot in the arm when it comes to the

Northern Powerhouse 'levelling up'.

He claims that he thinks "the metaverse is the next computing platform. It's not a white elephant. It's the next evolutionary step, not just for the Internet, but for computing as a whole. Also, nobody knows just how many jobs the metaverse will create but it'll spawn an entire new industry. And, of course, for all the drawbacks there will be huge benefits."

"For me, it could even be the way the country finally 'levels up'."

"If you can commute virtually you don't need to live in London. You don't need to be physically located anywhere."

"The Northern Powerhouse should be based around VR and AI because these are two technologies where you can actually level up, because location doesn't matter, providing you've got enough bandwidth."

Provided by Liverpool Hope University