



## ETC@USC Multiverse Challenge

### The 6 submissions selected by the judges

#### Background

**The Challenge:** Think about your personal vision of what “the metaverse” could be, and your unconstrained view of where things may be headed. Now, in 250 words or less (diagrams and pictures optional), describe a creative way to redesign, repurpose, or use an existing technology, process, or business model in a new way to create something that the world hasn't seen before.

**This is a written idea competition. No digital prototypes required. Just innovative thinking.**

**The Prize:** Students whose submissions are chosen by the judges will be invited to participate in a 1-hour discussion of the future of ‘the multiverse’ with the judges and other ETC@USC member-company executives.

The **deadline** for entering this challenge is noon **Thursday, April 14, 2022**.

#### **The 6 Submissions** selected by the judges out of 31 submissions

##### **Kenny Low**

Computer Science Graduate Student  
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“Any sufficiently advanced technology is indistinguishable from magic” wisely spoken by Arthur C. Clarke in the 1960s. Amidst the societal implications that may arise from this digital revolution, the world is in a crucible of the remaking of human consciousness. One that

transcends the limitations of geography, symphonizes the integration of digitization into the human psyche and its perceived reality.

I dream of a future where people separated by thousands of miles could reunite with their loved ones augmented by high fidelity graphics and in real-time (enabled by 5G/6G network). They could feel one another (enabled by high-fidelity haptics) and even sense the fragrance of food (digitization of olfaction and taste)!

The Copenhagen interpretation of the many-worlds become a living reality where traveling into an alternate futuristic universe or backward in time is now possible. A digital twin of the 1800s could be created with high-fidelity details that allows one to experience how living is like in the 19th century. Man has truly broken free of the physical limitations of the body and roam freely across space and time.

The realization of this vision may involve getting the industry's ecosystem to come into agreement of a global standard for 3D multimedia content so as to proliferate the usage of such technologies to the consumer level. Further breakthrough in sensor hardware (range and fidelity of depth capture), energy density (longer battery life), material (lighter weight) with marginal increase in cost are likely needed before mass adoption in the consumer space happens.

## **Chris Pickering**

Integrated Design, Business and Technology

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Shared AR experiences would enable users to engage with digital overlays simultaneously. Current AR offerings are highly individualized and asynchronous. The opportunity is to have multiple individuals or even masses 'see' the same AR asset at once.

Theme parks provide a unique setting where the background is static and all guests can be provided with identical AR interfaces (preferably glasses). A centralized computer tracks geo-positioning of each AR interface (user) and calculates how the AR asset would be viewed spatially in relation to each user. Additional physical assets can be synchronized with the AR asset to further bring the experience to life. For example, an animated dragon claws its way atop a castle and spews real fire over the crowd. Synchronized audio can be played over loudspeakers.

The AR glasses should also serve as a way-finding tool, allowing guests to plug destinations into a mobile app and have directions digitally imposed on their lenses. Filters for amenity, shopping, and concession overlays can be applied to draw in guests as they move about the park.

A simpler application would be as part of a stage show. AR glasses assigned to color-coded seating areas would provide appropriately-angled views of animated action amplifying a live performance. Guests would return the AR glasses as they exit the performance, mirroring existing procedures for 3D attractions. This would require significantly less AR glasses and serve as a proof-of-concept for broader implementation.

## **Xiaojing Fu**

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Nowadays, when people think about "the metaverse", people think about the forms of "the metaverse": 1. A video game adapted to virtual reality, such as the ones in Ready Player One and Free Guy; 2. An extension of reality that can enhance your life and working experience by using AR, VR and MR (XR), just like Mark Zuckerberg's future vision on Meta. I think "the metaverse" is much bigger than what we thought.

Generally speaking, the internet is "the metaverse". More specifically, "the metaverse" is an extension of reality that is governed by its own institution, which is composed of every country that contributes to the construction of the metaverse, and is guided by its laws and regulations. In terms of the construction of the metaverse, every country builds its own servers to connect to other countries' servers in order to form a global metaverse web. These countries that use this platform will build the digital basic infrastructures and will provide the digital basic materials for its users to build the world themselves if they would like to, kind of like Minecraft. When users interact with the metaverse, they have the ability to choose different interacting modes based on their needs. If you choose "extended mode", you can still interact with both the physical and the virtual worlds and vice versa. All you need to do is wear VR glasses and a sensor suit. Wherever you go, they will render the physical world to be an extension of reality combined with physical and virtual objects. If you choose "immersive mode", you have the ability to immerse yourself completely in the virtual world, where anything is possible. You can create and redesign your house, your car, your appearance and even your superpower. What you need to do is lay in a meta pod and connect your brain to the server.

The best thing about the metaverse is it's not only for the living, but also for the dead. If your vital signs are dropping or you are in an irreversible vegetative state, you or your family can choose to upload your consciousness to the metaverse, where your existence will be forever and you have the possibility to do many things that are impossible in the physical world.

## **Katarina Blakeslee**

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Have you ever watched a film and thought, "wow, I wish I could just exist in this world?". Yeah, me too. And if you're anything like me, you would also catch glances of interesting settings and subplots that you wish could have been fleshed out more or explored with greater depth.

My proposal is a VR experience where the action happens around you and you can choose which adventures to follow (as though you were a background character). The only NPCs would be the major characters who move the plot. You can choose to follow them on their adventures, or you can talk to other often overlooked characters in the universe of the film. This not only allows fans of the film to become more invested in the world and lore, but also could allow for richer subplots and more freedom for writers to discuss every part of the world. It's a choose your own adventure game in a way that has never been seen before.

Let's take Spiderman: Into the Spider-Verse as an example. Imagine how exciting it could be to explore each universe that the characters came from. How many more characters could you create? How many more adventures could take place? How many more people could this add to your audience?

This can also be expanded into a multi-person version in which you and your friends can become the protagonists of your own adventure in your very favorite movies.

Thank you for your time.

## **Kylee Pena**

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For entertainment technology, the future of the metaverse is not the speculative and generalized version being discussed today. Instead, the metaverse can provide solutions to many of the challenges and newly discovered desires of those who work below-the-line in entertainment production technology. Broadly, the metaverse is a virtual space where people interact with digital versions of each other. Throughout the Covid-19 pandemic, we saw entertainment technologists and creative professionals working in an isolated fashion, attempting to recreate a spirit of collaboration using platforms like Zoom to see each other. They continued to supplement this with digital annotation and white boarding tools like Bluescape, Frame.io, and Mural. But these disparate tools and disconnected experiences did not enhance the intersection of art, technology, and business. For this below-the-line production technology space, the metaverse can unify these tool sets and bring artists and technologists into "the same room" even when they're far away from one another. Animators can express themselves physically for animation references. Film editors can see the emotional reaction of their director upon watching a cut. Enhanced metadata can exist in parallel to media and be interacted with differently. Through the metaverse, we take back much of the humanity

involved in creating side-by-side while also decentralizing the entire market so that location is no longer the primary filter of who gets to be "in the room" at all.

## **Lauren Tomita**

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2035. Amazon has claimed bankruptcy. It was the last of the old online companies that refused to embrace cryptocurrency. They said it would never happen because people wanted “real” things, not digital things. Although such a tale of one of the most famous companies falling sounds impossible, it can easily become a reality within the next 10 years if companies refuse to accept the metaverse and cryptocurrency. However, we should also consider the exciting possibilities that the metaverse may bring. I believe that one of the industries that will be most impacted by the metaverse is the entertainment industry. This industry thrives off of creativity and their own unique ideas. In the metaverse, this uniqueness may be used to create special currencies. For example, my favorite movie growing up was Beauty and the Beast. I collected Disney merchandise ranging from T-shirts to Halloween costumes, and other special items. Such merchandise could be collected in the metaverse using a special Disney cryptocurrency. Rather than using the standard dollar for a purchase, people would have a Disney dollar instead. It would make each brand unique and would allow fans to feel more special and connected to a particular franchise because of it. Unique currencies could expand beyond merchandise and could be used to allow fans access to theme parks, arenas, and more within the digital world. It is exciting to think about the possibilities that the metaverse will bring and our entrance into this new era is rapidly approaching.