

IMMERSIVE TECHNOLOGY

Art, Activism, and Community

DEFINITIONS GUIDE

- **360° Video**, also known as surround video, immersive videos, or spherical videos, are video recordings where a view in every direction is recorded at the same time, shot using an omnidirectional camera or a collection of cameras. During playback on a normal flat display, the viewer has control of the viewing direction like a panorama. It can also be played on a display or projectors arranged in a sphere or some part of a sphere.
- **3 Degrees of Freedom (3 DoF)** is a virtual reality concept that describes how learners interact with a virtual environment. With 3DoF, learners can: Look left and right, Look up and down, and Pivot left and right.
- **6 Degrees of Freedom (6 DoF)** refers to the specific number of axes that a rigid body is able to freely move in three-dimensional space.
- **Audio for AR**, also known as augmented audio, refers to the phenomenon of live audio being modified or enhanced by computer-generated sensory input.
- **Augmented Reality (AR)** is a direct or indirect live view of a physical, real-world environment, and those elements are "augmented" by computer-generated perceptual information (via phone and image recognition)
- **Avatar** is an icon or figure representing a particular person in video games, internet forums, etc.
- **Blockchain** is a system in which a record of transactions made in bitcoin or another cryptocurrency is maintained across several computers that are linked in a peer-to-peer network.
- **Cryptocurrency** is a digital currency in which transactions are verified and records maintained by a decentralized system using cryptography rather than by a centralized authority.
- **Digital Currency** is a form of currency that exists only in digital or electronic form and that can operate independently of a central bank.
- **Digital Environment** is a virtual or cyber-generated environment accessed or created through the use of one or more digital devices such as a computer, tablet, or cellular phone.
- **Echoes.XYZ** is open-source software that allows users to create geolocated, augmented audio experiences.

- **Firewall** is a part of a computer system or network which is designed to block unauthorized access while permitting outward communication.
- **Geolocation** is the process or technique of identifying the geographical location of a person or device by means of digital information processed via the internet.
- **GPS** or Global Positioning System is a highly accurate satellite-based navigation and location system. With a GPS receiver, users can quickly determine their precise latitude, longitude, and altitude.
- **Haptics** use technology that stimulates the senses of touch and motion, especially to reproduce in remote operation or computer simulation.
- **Head Mounted Display (HMD)** is a display device worn on the head or as part of a helmet with a small display optic in front of one or each eye. An HMD has many uses, including gaming, aviation, engineering, and medicine.
- **Head-Up Display (HUD)**, also known as a HUD, is any transparent display that presents data without requiring users to look away from their usual viewpoints.
- **Ledger** in cryptocurrency public ledger is a record-keeping system. The ledger maintains participants' identities anonymously, their respective cryptocurrency balances, and a record of all the genuine transactions executed between network participants.
- **(Interactive) Mapping** usually features hotspots or location markers that trigger video, sound or images. A hotspot is a location on the map that provides detailed information on that site.
- **Metaverse** is a virtual-reality space where users can interact with a computer-generated environment and other users.
- **Mint(ing)** is the process of generating new crypto coins by authenticating data, creating new blocks, and recording the information onto the blockchain through a "proof of stake" protocol.
- **Mixed Reality** is a medium consisting of immersive computer-generated environments combined with elements of a physical and virtual environment.
- **NFT** is a non-fungible (meaning non-replaceable) token consisting of digital data stored in a blockchain, a form of distributed ledger. The ownership of an NFT is recorded in the blockchain. NFTs can be created by anybody, and require few or no coding skills to create. NFTs typically contain references to digital files such as photos, videos, and audio.
- **NFC** or Near-Field Communications is a short-range wireless connectivity technology that enables communication between devices when they're touched together or brought within a few centimeters of each other.

- **Oculus** is a brand of virtual reality headsets (VR headset) that is designed to connect to a high-powered PC to enable advanced computations and graphics rendering.
 - **Open-source** software is software where the original source code is made freely available and may be redistributed and modified.
 - **Privacy** is an issue that concerns the computer community in connection with maintaining personal information on individual citizens in computerized record-keeping systems.
 - **Real-time** relates to a system in which input data is processed within milliseconds so that it is available virtually immediately as feedback, e.g., in missile guidance or airline booking systems.
 - **Roblox** is an online game platform and game creation system developed by Roblox Corporation that allows users to program games and play games created by other users in virtual reality.
 - **Sandbox** is metaverse-native video game that allows you to play, create, own, and govern a virtual space. Sandbox's economy is based on user-generated crypto and NFT assets, and it partners with global brands to deliver unique and enriching experiences.
 - **Simulation** is a program that is run on a computer and that uses step-by-step methods to explore the behavior of a mathematical model, usually this is a model of a real-world system.
 - **Skins** are a customized graphic user interface, and can be used to alter the user's appearance in virtual reality.
 - **Spark AR Studio** is an augmented reality platform for Mac & Windows that allows you to somewhat easily create AR effects for mobile cameras.
 - **Spatial Audio** enables you to hear three-dimensional audio that follows the movement of your device.
 - **Tilt Brush** is a 3D-painting virtual-reality application available from Google.
 - **U/X** is short for user experience.
 - **U/I** is short for user interface.
 - **(Crypto) Wallet** is a software program or physical device that allows you to store your crypto and allow for the sending and receiving of crypto transactions.
 - **Web-Based Program** is an application software that runs in a web browser, and requires users to have active network connection.
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ABOUT EN FOCO | En Foco, Inc. is a non-profit that supports U.S.-based photographers of African, Asian, Latino, Native American, and Pacific Islander heritage. Founded in 1974, En Foco makes their work visible to the art world, yet remains accessible to under-served communities. Through exhibitions, workshops, events, and publications, it provides professional recognition, honoraria, and assistance to photographers as they grow into different stages of their careers. For more information, please visit: enfoco.org.

ABOUT BRONXNET | BronxNet provides hands-on television production training, equipment access, and channels for Bronx residents. Award-winning BronxNet programs keep BronxNet in touch with the people, issues, neighborhoods, and activities that make the borough what it is today. For more information, please visit: www.bronxnet.org

ABOUT PREGONES PRTT | Pregones/Puerto Rican Traveling Theater (aka Pregones/PRTT) is a multigenerational performing ensemble, multidisciplinary arts presenter, and owner/steward of bilingual arts facilities in The Bronx and Manhattan. For more information, please visit: www.pregonesprtt.org

ABOUT BRONX COUNCIL ON THE ARTS | A pioneering advocate for cultural equity, the Bronx Council on the Arts (BCA) nurtures the development of a diverse array of artists and arts organizations and builds strong cultural connections in and beyond The Bronx. For more information, please visit: www.bronxarts.org

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