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Titolo	Emerging Metaverse XR and Video Multimedia Technologies : Modern Streaming and Multimedia Systems and Applications // by Jong-Moon Chung
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Collana	Maker innovations series
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Soggetti	Mixed reality Virtual reality Augmented reality Metaverse Multimedia systems - Technological innovations Human-computer interaction
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Nota di contenuto	Chapter 1. Introduction to Metaverse and Video Streaming Technology and Services -- Chapter 2. Metaverse XR Components -- Chapter 3. XR HMDS and Detection Technology -- Chapter 4. Deep Learning for Metaverse XR and Multimedia Systems -- Chapter 5. XR and Multimedia Video Technologies -- Chapter 6. Multimedia Streaming with MPEG-DASH -- Chapter 7. Content Delivery Network (CDN) Technology -- Chapter 8: Cloud Computing and Edge Cloud Technologies -- Chapter 9: Emerging Technologies. .
Sommario/riassunto	Improve the video multimedia services you work on or develop using tools from video service technologies such as Netflix, Disney+, YouTube, and Skype. This book introduces you to the core technologies that enable Metaverse XR (eXtended Reality) services and advanced video multimedia streaming services. First, you'll find out about the current and future trends in Metaverse and video streaming services. XR is a combination of technologies that include MR, AR, VR, voice recognition systems, haptic and 3D-motion UIs, as well as head mounted displays) like Microsoft Hololens 2 and Oculus Quest 2. You'll

review metaverse services XR applications and learn more about the core XR feature extraction technologies. With XR capabilities mastered, you can move into the main technologies for video streaming services like Netflix, Disney+, and YouTube. You'll also about video formats, such as H.264, MPEG-4 AVC, H.265, MPEG-5, and MPEG-DASH. As well as online hosting services like content delivery network (CDN), mobile CDN, and Amazon Web Services (AWS). Additional details on content aging and updating operations along with CDN popularity predictions and contents update techniques, such as, Least Recently Used (LRU) and east Frequently Used (LFU) strategies are introduced. All these technologies enable fast, efficient, reliable, and adaptable video streaming services. They also allow for video conferencing services like Zoom, Skype and WebEx. By the time you've finished reading, you'll understand how these technologies converge into the Metaverse and and offer a wide variety of development opportunities for video streaming. .

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