

# Driving Media Technology Innovation: Insights and Highlights

BY RICHARD WELSH



**T**his issue of the Journal explores innovation and the latest advances in AI, 3D, and immersive entertainment.

Like SMPTE, the roots of these technologies are deeply rooted in the last century; the concepts and term artificial intelligence (AI) were first coined in the 1960s, and Stereo 3D and immersive viewers stretch even further back to the mid-1800s. In fact, the Victorian era stereograph marked the first mass-produced photographic images sold, and the mass production of film printing led to innovations that ultimately gave rise to the motion picture and the establishment of the Society of Motion Picture Engineers. Stereographs be-

came extremely popular in both Europe and America, where they were commonly found in households, ranging from low-cost card-mounted stereographs to more expensive, high-quality versions printed on porcelain or glass. Fast-forward to today, and we see that innovation still follows this pattern. Mobile phones with multiple high-quality cameras have become so ubiquitous that they have changed the industry in terms of the cost of mass-producing image sensors. This has recently led to an explosion of volumetric image capture devices, and now, they are combining modalities to produce highly accurate 3D scans that are no longer confined to stereo viewing but can be explored in a truly immersive

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manner. Alongside this, advances in AI not only improve the creation of these 3D models by “solving” the scan data but also hint at the further extension of immersive to entirely generative world building. What I find exciting about these developments is that they still have a long way to go, both in terms of creation and consumption of this new media paradigm. As generative AI and other machine learning (ML) techniques become increasingly commonplace in our production and experience of everything from video to audio to timed text, and immersive content, it is essential that we support these technologies through robust standards of authenticity, integrity, and interoperability. SMPTE continues to work at the forefront of these challenges to support these amazing innovations in a sustainable and technically rigorous manner.

As we continue to explore these frontiers, the Media Technology Summit (MTS), taking place from 13 to 16 October, is a must-attend forum for technical papers, demonstrations, and debates about these and all technologies that impact our industry. During the week, the Academy of Television Arts & Sciences will also honor the incredible hard work and technical advances of our Standards Community with an Engineering, Science & Technology Emmy Award for the SMPTE ST 2110 Standards Suite, along with the European Broadcasting Union (EBU) and the Video Services Forum (VSF). I’m sure all our readers join me in congratulating all the teams of these great organizations who brought ST 2110 to the industry. To cap off the week, the annual Awards Ceremony at MTS is the perfect opportunity to celebrate the innovation of our community and the dedication of

our members, whose voluntary work is the lifeblood of our organization. So, where better to join your SMPTE community and industry peers than at the MTS, to celebrate our achieve-

ments and look to the future of our industry!

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