The theme of this SMPTE conference is to examine and understand the impact of technology on the art of storytelling with the web as a key focus. The expansion of connectivity, bandwidth, and service options are redefining entertainment distribution to the living room, mobile, and beyond. Broadband, Wi-Fi, and Mobile networks are now beginning to leapfrog traditional distribution mechanisms, because of the rapid pace of innovation and performance improvements, flexibility of consumer options, and the ability to upgrade with a software download. Disruptive technologies such as artificial intelligence could well revolutionize how, and by whom, stories get told. Join technical and creative experts for this 2-day event at the brand new Google Event Center in Sunnyvale, CA. Learn from the experts who are developing, driving, and deploying the next generation of storytelling to gain actionable understanding via parallel technology and strategy tracks. A must-attend for engineers, creatives, researchers, and management engaged in the future of the technology of storytelling.

The ET@2018 Strategy track is meant for attendees interested in strategic issues relevant to the future of storytelling with joint sessions with the technology track where strategic themes overlap. All Strategy Track Sessions will be in the Valley Oak room.

8:30a  Morning Coffee/Registration

9:45a-10a  Opening Remarks (Joint Session with Strategy Track)
Pat Griffis, Conference Chair and SMPTE Executive Vice President; Vice President Technology, Office of the CTO, Dolby Laboratories
Keith Graham, SMPTE San Francisco Section Chair

10a- 11a  Masses of Media - Solving the Challenges of Security, Contracting and Distribution at Scale
Room: Valley Oak (Joint Session with Strategy Track)
Moderator: Patrick Griffis
Speaker: Michelle Munson, Co-Founder and CEO, Eluvio

The media industry has experienced dramatic growth in OTT services and transformation of the direct-to-consumer business with a backdrop of massive innovation in cloud infrastructure, decentralized ledgers, and machine learning. Yet in spite of this renaissance, for over twenty years the media industry has largely relied on an ad hoc supply chain and contracting, disparate storage, and costly distribution. This talk from one of the visionaries in large file delivery at scale aims to introduce the key technical challenges that have stood in the way and new technology platform solutions to help address these problems in the future.

11a- 12p  From Broadcast to IP: A Perspective on the Transition
Room: Valley Oak (Joint Session)
Moderator: Patrick Griffis
Speaker: Matthew Goldman, President, SMPTE; SVP Technology, Ericsson

A technical perspective and time line on the reinvention of broadcast in the age of the Internet from an industry veteran and the new generation of SMPTE Standards such as ST-2110 that are enabling the transition.

Noon-1:30p  Networking Lunch
Enjoy conversation with colleagues over lunch.

1:30p-2:00p  Keynote: A.I. and Imaging: What’s The Future of the Technology?
Room: Valley Oak (Joint Session)
Speaker: Rajen Sheth, Director of Product Management, Cloud AI, Google

In this keynote, Rajen Sheth discusses how new advances in machine learning will reshape the entertainment industry—from content creation to delivery. The media industry is inundated with data, providing a unique opportunity to distill that information and empower customers with new capabilities for content discovery, curation and personalization. At the same time, machine learning-powered insights can assist
content creators to innovate and create new experiences tailored to the taste of their customers or engage entirely new audiences.

2:00p-3:00p  “Art”IFICIAL INTELLIGENCE – CAN IT IMPROVE STORYTELLING?
Room: Valley Oak (Joint Session)
Moderator: Michael Zink, VP Technology, Warner Bros.
Speakers:
Rajen Sheth, Director of Product Management, Cloud AI, Google
Jonathan Taplin, Director Emeritus, USC Annenberg Innovation Lab
Shawnna M. Hoffman, Global Co-Leader, IBM Cognitive Legal Practice
Dazza Greenwood, MIT Media Lab
Doug Lenat, CEO, CycCorp (Remote Dial-in)

Looking at the creative side of the business, could machine learning be applied to storytelling to assist writers or create some other forms of art? There’s plenty of debate about whether or not creating art can be performed by machines or requires human touch. This panel examines the possibilities of A.I. in the creative context, so don’t miss this interesting debate!

3:00p-3:30p  NETWORKING COFFEE BREAK

3:30p- 4:30p  A.I. IN YOUR EYE: CAN MACHINE LEARNING IMPROVE PICTURE QUALITY?
Room: Valley Oak (Joint Session)
Moderators:
Kip Schauer, Global Head of Media and Entertainment, Google Cloud
Mike Zink, VP Technology, Warner Bros.
Speakers:
Michelle Munson, CEO, Eluvio
Anush Moorthy, Sr. Software Engineer, Video Research and Algorithms, Netflix
Andrew Page, Product Manager, NVIDIA
Art Raymond, CEO, Levels Beyond
Hui Fang, Software Engineer, Google AI

Application of machine learning to entertainment is an interesting topic. Can deep learning technology improve compression, supply chain efficiencies or perhaps be applied to quality control? There are many, many applications for machine learning in our industry. Join this panel of experts on some of the ways AI could be applied to the production side of the business.

4:30p- 5:30p  AI AND COPYRIGHT: WHOSE STORY IS IT ANYWAY?
Room: Valley Oak (Joint Session)
Moderator: Jim Burger, Esq., Thompson Coburn, LLP
Speakers:
Jim Burger, Esq., Thompson Coburn, LLP
Brian Kuhn, Esq., Founder and Co-leader of IBM Watson Legal, IBM
Pamela Samuelson, Richard M. Sherman Distinguished Professor of Law and Information at the University of California, Berkeley
Kristina Ringland, Esq., Copyright Attorney, Microsoft

Artificial intelligence (A.I.) has evolved to enable a machine to produce a coherent novel or
script. This raises at least three significant issues: First, is it an original work entitled to copyright; if so who owns that copyright? We know a monkey can’t own a selfie copyright, but can a computer own a copyright? Second, in creating the knowledge database has there been infringement? In order for the AI to create the script, it will most likely have to ingest a huge number of copyrighted works. In the Google Books decision, the courts held copying 20 million books was fair use in those specific circumstances. Is it fair use here? Finally, is the A.I. script infringing? Has it “copied” the expression of any of the works it ingested? The panel's intellectual property experts will discuss these provocative but increasingly relevant issues.

5:30 – 6:15 p  Trust In Storytelling: Can Content Creators Ever Win?
Room: Valley Oak (Joint Session)
Moderators:
Jim Helman, CTO, Movielabs
Allan McLennan, Chief Executive, CMT/PADEM Media Group
Speakers:
Ivan Verbesselt, SVP Mktg/Tech, NAGRA SA, Switzerland
John Canning, VP, Producer’s Guild of America
Michael D. Smith, Professor of IT & Marketing, CMU Heinz College

Akin to the classic predator/prey evolution cycle- as protection technologies improve, pirates find new ways to defeat them. What is the state of the art and is there an end in sight? Two sides to the issue: enforcement and prevention. What alternative technical strategies are emerging for fighting infringement?

6:15p – 9p Recap, Reception with HPA Young Entertainment Professionals, and Evening Event
Sponsored by Google
Cocktails and Snacks with colleagues from the Hollywood Professional Association’s “Young Entertainment Professionals” followed by a movie screening on Sony’s state of the art, 1000 Nit, 29 foot diagonal, direct view CLED display.

We are pleased to present a special 20th Anniversary event.
The Fifth Element

New York cab driver Korben Dallas didn't mean to be a hero, but he just picked up the kind of fare that only comes along every five thousand years: A perfect beauty, a perfect being, a perfect weapon. Together, they must save the world. Bruce Willis, Milla Jovovich, and Gary Oldman star in acclaimed director Luc Besson's outrageous sci-fi adventure, an extravagantly styled tale of good against evil set in an unbelievable twenty-third century world. Now presented in full 4K resolution on Sony’s new CLED display technology. Experience this dynamic action favorite like never before.

Starring Bruce Willis, Chris Tucker, Gary Oldman, Milla Jovovich, Ian Holm
Sponsored by Sony Pictures with special thanks to Grover Crisp
4K Playback courtesy of VideoClarity.
The ET@2018 Strategy Track is meant for attendees interested in strategic issues relevant to the future of storytelling with joint sessions with the technology track where strategic themes overlap. All Strategy Track Sessions will be in the Valley Oak room.

8:30a  Morning Coffee/Registration

9:45a-10a  Opening Remarks  
Pat Griffis, Conference Chair and SMPTE Executive Vice President  
Richard Doherty, Technology Track Chair, Dolby Laboratories

10a-11a  Professional Quality Content in the Cloud: Threat to Traditional Production?  
**Moderator:** Colin Dixon, Founder & Chief Analyst, nSCREENMEDIA  
**Speakers:**  
Alan Cannistraro, CEO, Rheo TV  
Alex Collmer, CEO, VidMob  
Tom Sauer, Chief Development Officer, Zone TV

Creating content in the cloud has taken a radical departure from more traditional methods. The normal processes, equipment, and resources used for premium content creation aren't necessarily required to achieve professional quality. Sometimes, cloud creation can achieve results impossible to achieve by other methods. But do the results make the grade? In this session, we'll talk with companies leveraging cloud resources to create and deliver new consumer video experiences online. From linear to live, ads to social video, we will work to understand how creation happens in the cloud, and the quality it can deliver.

11a-12p  Storytelling Using the Cloud  
**Moderator:** Tom Coughlin, Coughlin Associates  
**Speakers:**  
Richard Duke, Cloud Solutions Architect, Avid  
Gerald Tiu, Senior Program Mgr/ Media & Entertainment Strategic Architect, Microsoft  
Stefaan Vervaet, Sr. Dir. Strategic Mrkts, HGST, a Western Digital Company

Storytellers are perennially challenged to complete stories under tight timelines. With more complex technologies and pressure for even shorter timelines, there is increasing interest to leverage emerging cloud tools to provide better, faster, creative collaboration, thereby raising the quality of professional content in a shorter period of production time. Join this session to learn on the latest thinking and practice on using the cloud for storytelling.

Noon - 1:30p  Networking Lunch  
Enjoy conversation with colleagues over a provided lunch.

1:30p-2p  Keynote: While There’s Certainly a Future, Are We Certain What It Is?  
**Speaker:** Nicklas Bergman, Entrepreneur, Investor, Futurist
Nicklas Bergman has published a new book on how to deal with technologies from a business perspective called “Surviving the Tech Storm – Strategy in Times of Technological Uncertainty”. Nicklas will cover these aspects with an eye to entertainment in this equally entertaining keynote. Learn more at www.nicklasbergman.com

2p-3p  Day and Date Release to Your Living Room?
Moderator: Wendy Aylsworth, SMPTE Past-President
Speakers:
Helen Lude, Student Researcher
Steve Weinstein, Founder, Kinetrope
Cihan Fuat Atkin, Founder & CEO, XCINEX Corp

In this panel, we will look at shifting trends on the consumption of movies. New business models are experimenting with simultaneous theatrical and premium home release windows. How real is it and what does it mean for theaters and more importantly consumer business models?

3p-3:30p  Networking Coffee Break

3:30p-4:30p  What’s the Story on Storytelling With Audio?
Moderators:
Jeff Riedmiller, VP Sound Technology, Dolby
Kent Terry, Sr. Manager, Sound Technology, Dolby
Speakers:
Hank Frecon, CEO, Source Digital
Sunil Bharitkar, Distinguished Member of Technical Staff, HP Labs
Scott Kramer, Audio Engineer, Netflix

The entertainment industry continues its endeavor to surface and embrace technologies poised to provide meaningful improvements to storytelling - including the effectiveness of advertising. For sound, recent advancements in the creation, delivery and rendering of improved experiences is built with the intention of engaging our auditory system in a more natural way – whether in the theatre, at home or on the go. Three-dimensional object-oriented (a.k.a. immersive sound) has become a well-established audio representation and format used to advance the art of storytelling with the additional benefit of improving audience engagement. Join this session to hear the latest on how improvements in sound can play a central role in telling a more realistic and engaging story.

4:30p-5:30p  VR as a Tool for Next Generation Storytelling: Ready for Prime Time?
Moderators:
Mike DeValue, Director, Technology Standards and Strategy, Disney
Walt Husak, Director, Imaging Technology/ Dolby
Speakers:
José Roberto Alvarez, Director Strategy & Planning, Futurewei Technologies
Larry Cutler, CTO, Baobab Studios
Hari Lakshman, Sr. System Research Architect, Dolby
Lindsey Townley, Media Technology Lead, Universal Pictures

There is growing interest in VR technology as a potential way to tell stories. But is it ready for prime time? Join this panel of technical and creative experts to understand the latest
thinking.

5:30 – 6 pm  **Wrap-up (Joint Session)**
Pat Griffis/Conference Chair, Session Chairs, and Attendees

A review of the highlights and key takeaways from the conference with an open dialog with audience on reactions, insights gained, and topics for the future.

6 pm  **Adjourn**