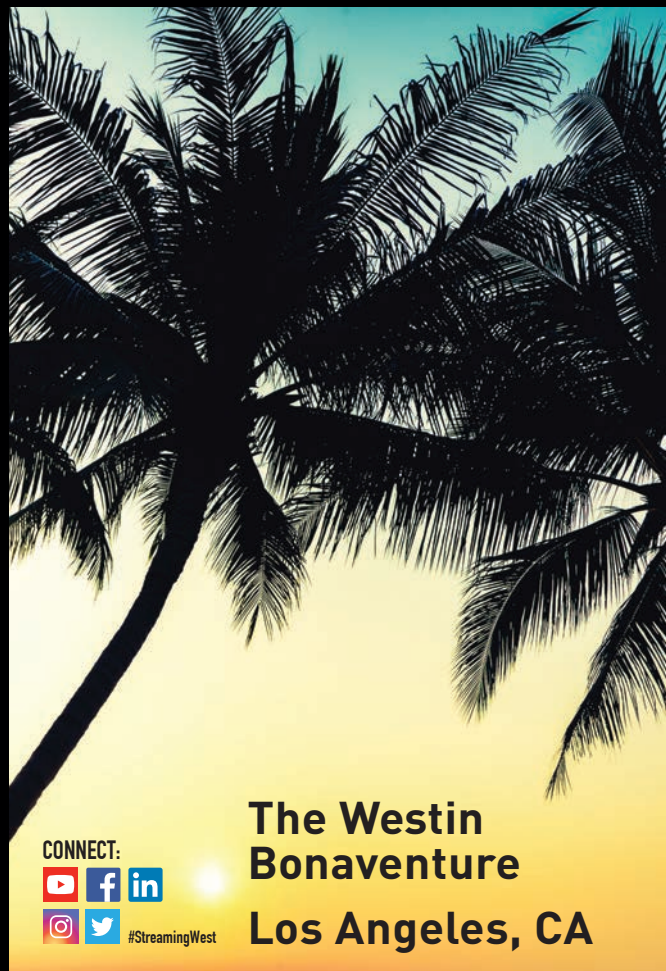# streaming media west
the business and technology of online video

SM

November 19-20, 2019

PRECONFERENCE WORKSHOPS
MONDAY, NOVEMBER 18

- Learn what you need to know to make streaming work—from content capture and creation to distribution and management
- Get in-depth training on online video technology and applications in intensive preconference seminars
- Learn about the new business and distribution models for online video
- Gain access to the Exhibit Hall featuring major streaming and online video vendors
- Network with your colleagues, peers, and experts in streaming media

CONNECT:
#StreamingWest

The Westin Bonaventure
Los Angeles, CA

STREAMINGMEDIA.COM/WEST

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FEATURING THESE SPECIAL EVENTS
live streaming SUMMIT   OTT LEADERSHIP SUMMIT   Video Engineering Summit   ESPORTS & SPORTS STREAMING SUMMIT   STREAMING MEDIA UNIVERSITY

streaming media *west*
the business and technology of online video

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PRECONFERENCE WORKSHOPS
MONDAY, NOVEMBER 18

WHO SHOULD ATTEND?

Streaming Media West is the only online video show focused on giving you real information you can apply immediately in your business and is a must-attend event for:

■ Entertainment, media, and sports video
  CEOs and CTOs
■ Broadcaster, telco, MSO, and MVPD executives
■ Advertising and web marketers
  and agency executives
■ Live streaming producers and engineers
■ Video engineers, developers,
  and IT professionals
■ Video delivery network architects
■ Independent content creators
  and studio executives
■ Social video producers, strategists,
  & YouTube creators
■ Analysts, investors, and venture capitalists
■ Enterprise video and technology professionals
■ Education and training video experts
■ Worship video producers and coordinators
■ Streaming media industry professionals
■ Streaming Media West is for YOU!

CONNECT:

#StreamingWest

The Westin Bonaventure
Los Angeles, CA

THE WORLD'S LEADING Streaming Media Conference

Join us this November for three days of practical advice, inspiring thought leadership, and in-depth training. Join your peers to learn, share, and celebrate the disruptive trends shaping the future of digital media. See where the world of online video is going, and how to get there first.

At Streaming Media West 2019, you'll hear the innovative approaches that the world's leading organizations are deploying in live streaming, OTT, enterprise and educational video, encoding and transcoding, next-gen TV, VR video, video production, content delivery, video marketing, content monetization, and much more. Whether you are an executive or manager interested in new business strategies and trends or a production, IT, or engineering professional from the technical side, you'll find all of your bases covered at Streaming Media West.

You can expect to leave Streaming Media West with new friends and business allies and actionable advice and strategies for moving your business forward. Please join us in Los Angeles, CA this November for this career- and organization-changing opportunity.

STREAMINGMEDIA.COM/WEST

FEATURED SPEAKERS

Kiran Paranjpe
Google, Inc.

Brendan Reiley
NASCAR Digital Media

Robert Reinhardt
VideoRx

Jan Ozer
Streaming Learning Center

FIND YOUR TRIBE & LEARN FROM THEM

Streaming Media has been the number one gathering place for professionals involved in online video for two decades. For more than 20 years, attendees, speakers, and sponsors at Streaming Media West have met once a year to help build, develop, and educate a market. Streaming Media continues to be the place to network with your peers and learn from the leaders and innovators in the field. Whether you are from broadcasting and cable, media and entertainment, education, IT, sports, advertising, telco, or any other industry involved in online video, you'll find your niche at Streaming Media West in Los Angeles, CA.

800+ Attendees

Connect with like-minded professionals to learn about technologies and strategies related to all types of streaming media applications. Use this opportunity to network with your peers and learn from their successes and failures.

100+ Speakers

Streaming Media conferences attract the best and the brightest that the industry has to offer. Hear from the leading analysts and brands in the world, innovative startups, and leading practitioners and executives from all types of unique organizations.

40+ Solutions

The top technologies and solutions for all of your streaming media needs are on display on our showcase floor. Take this opportunity to be dazzled by new tech, where you can efficiently compare and contrast solutions in this unique, one-of-a-kind environment.

streaming media west

FEATURES SESSIONS COVERING THE FOLLOWING TOPICS:

- Subscription Fatigue: Too Much of a Good Thing?
- The Video Engineer's Toolbox
- Bringing Convenience to Corporate Streaming
- The State of the CDN Market
- Engineering a Modern Super Bowl Streaming Workflow from the Ground Up
- Reaching Generation Z
- Low Latency Live Streaming at Scale
- Microservices in Action
- Understanding the DRM Lifecycle
- Open-Source Streaming
- Real-Time Remote Production for the FIFA Women's World Cup
- Who Cares About Sports & News?
- Applications of Per-Title Encoding
- UX: Keep Viewers Happy
- How Niche Video Services Can Find Success
- The New Athletes: Stars of Esports
- Connecting the Dots for Connected TV Advertising

streaming media west

SM

the business and technology of online video

November 19-20, 2019

PRECONFERENCE WORKSHOPS
MONDAY, NOVEMBER 18

The Westin Bonaventure

Los Angeles, CA

TRACKS & SPECIAL EVENTS

Business & Strategy TRACK

Attention C-level executives and VPs, digital media strategists, and sales, marketing and product managers: This is your home at Streaming Media West. This forward-thinking track offers high-level strategic discussions to learn from the best where the online video economy is moving. We shed light on the future of the online video marketplace, discussing ways broadcasters, cable and satellite operators, MVPDs, and content rights holders can unlock the value of OTT and TV Everywhere. It points to improvements in content creation, acquisition, and monetization and reveals coming shifts in consumer viewing habits. A sea change is coming to streaming media; this track is for executives who want to ride the wave.

Technical & How-To TRACK

The Technical & How-To Track is for CTOs, technology managers, studio professionals, and developers who want one thing: solutions. The video ecosystem is a fragmented mix of platforms and devices: Learn from the pros how you can eliminate the bottlenecks and deliver results. Expert presenters will offer sessions on the entire video workflow, from formats to delivery to player and UI development to AI and machine learning. This is the place to go to learn real skills and improvements you can put in place as soon as you're back in the office. And even if you're not currently a video developer and want to learn more about how the technology works, this track is for you.

Discovery TRACK

Open to all Streaming Media West 2019 conference attendees and Discovery Pass holders, Discovery Track sessions are moderated by *Streaming Media* magazine editors and presented by speakers related to our conference sponsors. The presentations, which typically focus on products and customer case studies, provide a good opportunity to learn more about specific technologies and practical solutions to real-world business needs. The Discovery Track is where to go to seek expertise and advice, get trained on unique products, or hear about new solutions and trends in online video. There's lots of variety and different types of sessions, so be sure to check our complete Discovery Track schedule as it is released about one month prior to the event.

OTT LEADERSHIP SUMMIT

OTT is the future of television, and this summit is a deep dive into how broadcasters, cable & satellite operators, MVPDs, vMPVDs, and content rights holders can unlock the value of OTT and TV Everywhere. Because business and technology factors work hand-in-hand to create a successful OTT service, we'll look at the entire OTT ecosystem to provide a thorough understanding of the opportunities and challenges that lie ahead. We'll also unveil fresh OTT research to give you actionable data and help you thrive in this increasingly competitive market.

This year at Streaming Media West 2019 in Los Angeles, CA we have eight tracks and special events taking place November 18 through November 20.

To kick off the event on Monday, November 18, we have Streaming Media University workshops, providing unique, in-depth training for streaming media pros. On the main conference days, November 19-20, we have tracks designed for everyone from your organization who is involved in streaming media. You and your team can choose from the following:

- Business & Strategy Track
- Video Engineering Summit
- Live Streaming Summit
- Technical & How-To Track
- Esports & Sports Streaming Summit
- Discovery Track
- OTT Leadership Summit

There are a variety of combination passes and standalone passes available to allow you to attend the whole event, or just focus on content geared to your particular needs. See the registration form for details. Many organizations send groups, and special pricing is available to organizations sending a "team."

Video compression and related technologies are the bedrock of the online video industry, and they've always been the heart of Streaming Media. The Video Engineering Summit is for the hardcore video engineers, the ones who are really pushing the boundaries of video quality and compression efficiency. It's a deep dive into encoding and transcoding, packaging and delivery, player and UI development, and formats, protocols, and standards. If you're looking for deep dives into HEVC, VP9, AV1, DASH, CMAF, WebRTC, video optimization, or perceptual quality, you've come to the right place. Our expert speakers will help you take your video to the next level.

Live Streaming Summit focuses on the challenges and opportunities inherent in delivering large-scale live events and live linear channels to multiple screens. Sessions address every step of the live video workflow, including ingestion, transcoding, management, distribution, and post-event evaluation. Whether you're streaming one-time entertainment, news, sports, esports, or worship events, or delivering recurring live content, we've got you covered. While other events focus on event video production, the Live Streaming Summit takes it to the next level, covering the technologies and strategies required to take that video and deliver it to viewers watching on every device.

Nowhere is streaming having a bigger impact than on live sports. It's not just how we watch, it's what we watch. Esports are products of the digital age and traditional sports are running to keep pace with this upstart. The Esports & Sports Streaming Summit is the place to be for a closer look at the incredibly addicting, highly charged, and constantly evolving world of esports and sports streaming. We'll bring you into the conversations happening right now—and even anticipate the changes ahead, so you can profit!

Streaming Media University features world-class experts delivering content-rich training. This series of Monday workshops at our Streaming Media West 2019 event offers attendees the opportunity to get deep-dive training on online video and streaming technologies. Three hours in length, these workshops give you the sound theories and practiced techniques to become a top performer in the online video field. In the end, you walk away with unique, in-depth training, a Streaming Media University Completion Certificate, and the professional know-how to enhance your career.

live streaming
SUMMIT

NOVEMBER 19, 2019
Los Angeles, CA

Live Streaming Summit focuses exclusively on the challenges and opportunities inherent in delivering large-scale live events and live linear channels to multiple screens. Sessions will address every step of the live video workflow, including ingestion, transcoding, management, protection, distribution, analytics, and post-event evaluation. Whether you're streaming one-time entertainment, news, sports, esports, or worship events, or delivering recurring live content, we've got you covered. While other events focus on event video production, the Live Streaming Summit takes it to the next level, covering the technologies and strategies required to take that video and deliver it to viewers watching on computers, tablets, mobile phones, set-top boxes, and smart TVs.

INTERESTED IN SPONSORING LIVE STREAMING SUMMIT?
CONTACT: Joel Unickow ▐ Tel: 250-933-1111 ▐ joel@streamingmedia.com

🐦 #LiveStreamingSummit

TOPICS COVERED INCLUDE:
➤ Bringing Convenience to Corporate Streaming
➤ Live-Streaming Best Practices
➤ Fireside Chat With Industry Leaders
➤ Real-Time Remote Production for the FIFA Women's World Cup
➤ Scaling for the Demands of a Growing Live Audience

Four Featured Events At

ESPORTS & SPORTS STREAMING SUMMIT

NOVEMBER 19–20, 2019
Los Angeles, CA

Nowhere is streaming having a bigger impact than on live sports. It's not just how we watch, it's what we watch. Esports are products of the digital age. They were born online, and for generations of young people they're the only sports they know. Fans and stars have created a world where everyone can participate and all are welcome, where people can find their tribe and take part. It's inclusive, interactive, multi-platform, and always live. While the games might be virtual, the money at stake is very real. Traditional sports are running to keep pace with this upstart, experimenting with multiplatform distribution, VR and AR, digital enhancements, and online gambling. They're also placing bets by starting or acquiring their own esports leagues. Publishers see the changes coming, and are adapting to support both groups, because really it's all just sports nowadays, whether or not there's an "e" in front of the word. As long as it involves intense live competition and dedicated fans, publishers are happy to deliver. This incredibly addicting, highly charged, constantly evolving world needs a conference that can keep up with—and even anticipate—the changes ahead. The Esports & Sports Streaming Summit is that event. Plan to join us this November at The Westin Bonaventure Hotel in Los Angeles, CA for this exciting new event.

INTERESTED IN SPONSORING ESPORTS & SPORTS STREAMING SUMMIT?
CONTACT: Joel Unickow ▐ Tel: 250-933-1111 ▐ joel@streamingmedia.com

🐦 #EsportsandSportsSummit

TOPICS COVERED INCLUDE:
• Big Moves From the Big Leagues
• Increasing Fan Engagement
• Focus on Fans: The Next Generation
• Live Streaming in Challenging Conditions
• Technology and the In-Stadium Experience
• The New Athletes: Stars of Esports
• A More Perfect Workflow: Getting Live Sports Right
• Monetizing Your Assets— Gaming and Sponsor Integrations
• The 5G Future
• Playing in VR/AR/360°
• Niche Sports Find a Home

Video Engineering Summit

Los Angeles, CA
NOVEMBER 19–20, 2019

Video compression and related technologies are the bedrock of the online video industry, and they've always been the heart of Streaming Media. The Video Engineering Summit is for the hardcore video engineers, the ones who are really pushing the boundaries of video quality and compression efficiency. It's a deep dive into encoding and transcoding, packaging and delivery, player and UI development, and formats, protocols, and standards. If you're looking for deep dives into HEVC, VP9, AV1, DASH, CMAF, WebRTC, video optimization, or perceptual quality, you've come to the right place. Our expert speakers will help you take your video to the next level.

TOPICS COVERED INCLUDE:

- The Video Engineer's Toolbox
- Low Latency Live Streaming at Scale
- Applications of Per-Title Encoding

- Integrating CMAF Into a VOD Workflow
- Evaluating & Testing CDN Suppliers for Performance & Unit Economics
- Hardware Transcoding Solutions for the Cloud

- Controlling QoE With Better Data
- How to Customize Encoding, Packaging, & DRM for All Target Formats
- LCEVC: The Latest MPEG Standard

#VideoEngineering

INTERESTED IN SPONSORING VIDEO ENGINEERING SUMMIT?
CONTACT: Joel Unickow
Tel: 250-933-1111 | joel@streamingmedia.com

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OTT LEADERSHIP SUMMIT | NOVEMBER 19–20, 2019
Los Angeles, CA

OTT is the future of television, and this summit is a deep dive into how broadcasters, cable & satellite operators, MVPDs, vMPVDs, and content rights holders can unlock the value of OTT and TV Everywhere. Because business and technology factors work hand-in-hand to create a successful OTT service, we'll look at the entire OTT ecosystem to provide a thorough understanding of the opportunities and challenges that lie ahead. We'll also unveil fresh OTT research to give you actionable data and help you thrive in this increasingly competitive market.

TOPICS COVERED INCLUDE:

- Subscription Fatigue: Too Much of a Good Thing?
- Reaching Generation Z
- Ad-Supported VOD as an Alternative to Broadcast & SVOD
- Understanding the DRM Lifecycle
- Who Cares About Sports & News?

- How Niche Video Services Can Find Success
- 2019—The Year of Direct-to-Consumer Video Services?
- Harness SSAI's Superpowers
- Addressable TV: How Close Are We to Finding the Holy Grail?
- Fireside Chat: TV Everywhere at Cox Media

#OTTSummit

INTERESTED IN SPONSORING OTT LEADERSHIP SUMMIT?
CONTACT: Joel Unickow | Tel: 250-933-1111 | joel@streamingmedia.com

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STREAMINGMEDIA.COM/WEST

MONDAY, NOVEMBER 18 PRECONFERENCE WORKSHOPS *(priced separately)*

9:00 a.m. – 12:00 p.m.	**W1** I Introduction to ABR Production & Delivery	**W2** I Deploying CMAF; Why, When, & How	**W3** I Off-the-Shelf Streaming Tools
1:30 p.m. – 4:30 p.m.	**W4** I Objective Quality Metrics 2D & 3D	**W5** I Video Machine Learning: Customizing Solutions & Training Models	**W6** I Discovering the Power of FFmpeg
5:00 p.m. – 6:30 p.m.	**VIP WELCOME MIXER** on the Pool Deck *sponsored by* appl•caster		

TUESDAY, NOVEMBER 19

9:00 a.m. – 9:45 a.m. **WELCOME & OPENING KEYNOTE** I *Keynotes will be announced soon. Check our website for the latest details.*

9:45 a.m. – 10:00 a.m. **SPONSOR PRESENTATION** I MediaKind

10:00 a.m. – 10:30 a.m. **COFFEE** *sponsored by* verizon media I **NETWORKING AND OTT MEET UP** in the Streaming Media Showcase

	Business & Strategy	Technical & How-To	OTT LEADERSHIP SUMMIT	Video Engineering Summit
10:30 a.m. – 11:15 a.m.	**B101** Launching Original TV Content When It's Not on TV	**T101** HOW-TO: Fine-Tuning Your Encoding With Objective Quality Metrics	**OTT101** Subscription Fatigue: Too Much of a Good Thing?	**VES101** The Video Engineer's Toolbox
11:30 a.m. – 12:30 p.m.	**B102** Risk & Decision: The Insider's Guide to Avoiding Disaster When Building a Video Service	**T102** Engineering a Modern Super Bowl Streaming Workflow From the Ground Up	**OTT102** Fireside Chats: Finding New Audiences	**VES102** Low Latency Live Streaming at Scale
12:30 p.m. – 1:30 p.m.	**ATTENDEE LUNCH**			
1:30 p.m. – 2:15 p.m.	**B103** What You Need to Ask Ad Tech Vendors	**T103** Microservices in Action	**OTT103** Understanding the DRM Lifecycle	**VES103** Integrating CMAF Into a VOD Workflow
2:15 p.m. – 2:45 p.m.	**COFFEE** *sponsored by* verizon media I **NETWORKING AND LIVE STREAMING MEET UP** in the Streaming Media Showcase			
2:45 p.m. – 3:30 p.m.	**B104** Fireside Chat: The State of the CDN Market	**T104** Open Source Streaming	**OTT104** Fireside Chat: TV Everywhere at Cox Media	**VES104** Evaluating & Testing CDN Suppliers for Performance & Unit Economics
3:30 p.m. – 4:30 p.m.	**HAPPY HOUR** in the Streaming Media Showcase *sponsored by* MediaKind			
4:30 p.m. – 5:15 p.m.	**B105** Optimizing Corporate Communications	**T105** ATSC 3.0: What You Need to Know	**OTT105** Who Cares About Sports & News?	**VES105** Applications of Per-Title Encoding
5:30 p.m. – 7:00 p.m.	**NETWORKING RECEPTION**			

WEDNESDAY, NOVEMBER 20

8:30 a.m. – 9:00 a.m. ***Streaming Media* Magazine's Readers' Choice Awards Breakfast** Silver Sponsors MAGEWELL ⬤⬤⬤OPTICS

9:00 a.m. – 10:00 a.m. **KEYNOTE** I **The Next Generation of Sports Streaming**

10:00 a.m. – 10:30 a.m. **COFFEE** *sponsored by* verizon media I **NETWORKING AND ESPORTS & SPORTS MEET UP** in the Streaming Media Showcase

	Business & Strategy	Technical & How-To	OTT LEADERSHIP SUMMIT	Video Engineering Summit
10:30 a.m. – 11:15 a.m.	**B201** UX: Keep Viewers Happy	**T201** HOW TO: Playout in the Cloud	**OTT201** How Niche Video Services Can Find Success	**VES201** Controlling QoE With Better Data
11:30 a.m. – 12:30 p.m.	**B202** Connecting the Dots for Connected TV Advertising	**T202** Multicast: Has Its Time Finally Arrived?	**OTT202** 2019—The Year of Direct-to-Consumer Video Services?	**VES202** Hardware Transcoding Solutions for the Cloud
12:30 p.m. – 1:30 p.m.	**LUNCH BREAK —** Visit the Streaming Media Showcase			
1:30 p.m. – 2:30 p.m.	**B203** Video Machine Learning Demystified	**T203** HOW-TO: Latency, Real-Time Streaming, & WebRTC	**OTT203** Harness SSAI's Superpowers	**VES203** How to Customize Encoding, Packaging, & DRM for All Target Formats
2:30 p.m. – 3:00 p.m.	**COFFEE** *sponsored by* verizon media I **NETWORKING AND VIDEO ENGINEERING MEET UP** in the Streaming Media Showcase			
3:00 p.m. – 3:45 p.m.	**B204** Mixed Realities: VR, AR, & XR	**T204** 5G & the Future of Streaming	**OTT204** Addressable TV: How Close Are We to Finding the Holy Grail?	**VES204** LCEVC: The Latest MPEG Standard
4:00 p.m. – 4:45 p.m.	**CLOSING KEYNOTE** I *Keynotes will be announced soon. Check our website for the latest details.*			

CONFERENCE AT-A-GLANCE

All Conference Registrations Include:

- Access to keynotes, conference sessions, and networking opportunities *(subject to pass selected)*
- Light continental breakfast and morning and afternoon coffee breaks
- VIP Welcome Mixer on Monday evening
- Admission to the Streaming Media Showcase including the Tuesday Happy Hour
- Access to the conference-wide Reception on Tuesday evening
- *Streaming Media* Magazine's Readers' Choice Awards Breakfast on Wednesday morning

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WELCOME & OPENING KEYNOTE | *Keynotes will be announced soon.*

SPONSOR PRESENTATION | MediaKind

COFFEE, NETWORKING, AND MEET UP in the Streaming Media Showcase

ESPORTS & SPORTS STREAMING	live streaming SUMMIT	Discovery Track
ESS101 Big Moves From the Big Leagues	**LS101** Bringing Convenience to Corporate Streaming	**DT101** Discovery Track Session
ESS102 Focus on Fans	**LS102** Live-Streaming Best Practices	**DT102** Discovery Track Session

ATTENDEE LUNCH

ESS103 A More Perfect Workflow: Getting Live Sports Right	**LS103** Fireside Chat With Industry Leaders	**DT103** Discovery Track Session

COFFEE, NETWORKING, AND MEET UP in the Streaming Media Showcase

ESS104 The New Athletes: Stars of Esports	**LS104** Real-Time Remote Production for the FIFA Women's World Cup	**DT104** Discovery Track Session

HAPPY HOUR in the Streaming Media Showcase *sponsored by* MediaKind

ESS105 Technology and the In-Stadium Experience	**LS105** Scaling for the Demands of a Growing Live Audience	**DT105** Discovery Track Session

NETWORKING RECEPTION

Readers' Choice Awards Breakfast

KEYNOTE | **The Next Generation of Sports Streaming**

COFFEE BREAK in the Streaming Media Showcase

ESPORTS & SPORTS STREAMING	Discovery Track
ESS201 Live Streaming in Challenging Conditions	**DT201** Discovery Track Session
ESS202 Moneyball: Monetizing Your Assets	**DT202** Discovery Track Session

LUNCH BREAK — Visit the Streaming Media Showcase

ESS203 Overtime: Here's What's Next	**DT203** Discovery Track Session

COFFEE BREAK in the Streaming Media Showcase

ESS204 Niche Sports Find a Home	**DT204** Discovery Track Session

CLOSING KEYNOTE | *Keynotes will be announced soon.*

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2 WAYS TO SAVE

1 Register by October 12, and **SAVE** up to **$100**.

2 Attend Streaming Media West and all of the Summits PLUS two workshops when you choose the All Access Pass. You'll **save more than $500** over the separately priced passes, when purchased by the early-bird deadline!

GENERAL INFORMATION

VIP Welcome Mixer
Monday, November 18 |
5:00 p.m. – 6:30 p.m.
Enjoy cocktails as you mix and mingle with other full-conference attendees, speakers, and exhibitors. A perfect way to kick off your Streaming Media experience!

Streaming Showcase Happy Hour
Tuesday, November 19 |
3:30 p.m. – 4:30 p.m.
Grab a drink and visit with our exhibitors in a laid-back atmosphere.

Conference-Wide Networking Reception
Tuesday, November 19 |
5:30 p.m. – 7:00 p.m.
Relax and unwind after a full day of sessions. Our evening reception is the perfect place to network with industry peers while enjoying a drink and some tasty bites. Open to all attendees, speakers, and exhibitors.

Streaming Media Magazine's Readers' Choice Awards Breakfast
Wednesday, November 20 |
8:30 a.m. – 9:00 a.m.
Celebrate the winners of the 12th annual *Streaming Media* Magazine Readers' Choice Awards.
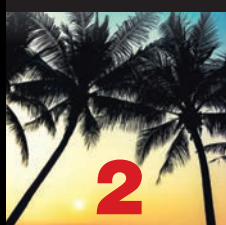
Streaming Media Showcase
Streaming Media West 2019 is your opportunity to develop a short list of streaming media technology and service providers that can help you overcome your online video challenges. At Streaming Media West, you'll gain exclusive access to the world's leading companies who are forging a path to a new era of digital media. Our Showcase area is designed to be a meeting and gathering place for attendees, speakers, and industry experts. Here you can share ideas, seek advice, and mingle with your friends, colleagues, and thought leaders in the industry. Access to the Showcase is included in all pass options.

Showcase Hours
Tuesday, November 19 |
10:00 a.m. – 4:30 p.m.

Wednesday, November 20 |
10:00 a.m. – 3:00 p.m.

MONDAY, NOVEMBER 18

All Streaming Media University Workshops Include:

❚ Light continental breakfast
❚ Morning and afternoon breaks
❚ Lunch (when you register for both a.m. and p.m. workshops)

❚ Access to the Streaming Media Showcase on Tuesday, November 19 and Wednesday, November 20
❚ Certificate of Completion

To get the most out of these workshops, we recommend a laptop. Attendees are responsible for providing their own laptop for use during this workshop. Laptops will not be provided.

MORNING WORKSHOPS ❚ 9:00 a.m. – 12:00 p.m.

W1 ❚ Introduction to ABR Production & Delivery

This course helps those new to streaming media get familiar with relevant terms, concepts, and technologies. The session begins with a definition of terms like codecs, container formats, and adaptive bitrate (ABR) streaming, as well as encoding concepts like bitrate control (VBR, CBR) and frame types (I, B, and P). Then it details the key H.264 encoding parameters that impact quality and compatibility. Next up is adaptive streaming, including a review of available ABR technologies like HLS and DASH, how to formulate an encoding ladder, and how to use multiple DRMs to protect premium content. Then we review the technical requirements for ABR delivery to computers, smartphones and tablets, OTT devices, and smart TVs. We finish with a quick look at advanced codecs like HEVC, VP9, AV1, and VVC. You walk away knowing the technical requirements for delivering to all key platforms and an understanding of how to do so.

PRESENTER: *Jan Ozer, Principal, Streaming Learning Center, & Contributing Editor,* Streaming Media

W2 ❚ Deploying CMAF; Why, When, & How

The concept of a single set of files deliverable to all relevant end points has been the holy grail since the dawn of adaptive bitrate (ABR) streaming. By mid-2019, the Common Media Application Format (CMAF) will enable such a solution, slashing encoding, storage, and bandwidth costs for companies who deploy it. In this workshop, attendees learn how to create CMAF-packaged assets for HLS and or DASH and get a greater understanding of the benefits CMAF has to offer. We start at the industry baseline of H.264-based CMAF content, then offer insight and direction on how to handle more complex and emerging solutions. We will briefly cover how to extend what you learned to alternate codecs starting with VP9, then to 4K encoding, packaging, and delivery with HEVC or AV1. Then, we dive into what needs to happen next inside the video players to enable proper multi-bitrate ABR streaming with low latency. Last but not least, we cover the details around protecting your CMAF content with DRM, including what you need to know about CENC, CBCS, CTR, and working toward truly fulfilling the vision for unified common encryption DRM on the horizon.

PRESENTER: *David Hassoun, Founder & CEO, RealEyes Media*

W3 ❚ Off-the-Shelf Streaming Tools

The build vs. buy debate will never go away, but sometimes the perfect tool for content development and distribution already exists, is easy to learn and use, and fits within your budget. This workshop covers the latest developments in a number of tools that will help you at virtually every step of the streaming video workflow, from editing to analytics. This workshop is open to product owners, engineering staff, or others involved with delivering media—you don't need a development background, just an interest in finding out how the latest tools can optimize your workflow. Nadine Krefetz and co-presenters cover the following types of tools: cloud-based switching products for multi-playout management; collaborative editing; UX prototyping; churn-busting analytics; artificial intelligence and machine learning; live and on-demand video libraries.

PRESENTER: *Nadine Krefetz, Consultant, Reality Software, & Contributing Editor,* Streaming Media

AFTERNOON WORKSHOPS ❚ 1:30 p.m. – 4:30 p.m.

W4 ❚ Objective Quality Metrics 2D & 3D: What They Are, How to Compute Them, & How to Use Them

Every compression practitioner should understand what objective quality metrics do, how to compute them, and how to use them. This workshop guides attendees through the following steps: an introduction to metrics like PSNR, SSIM, SSIMplus, and VMAF, plus several 3D metrics; how to compute metrics with open source tools like FFmpeg and VMAFMaster, as well as third-party tools like the Moscow State University Video Quality Measurement tool and SSIMWave Quality of Experience Monitor; how to interpret the results; how to use these tools to choose a preset, choose the top rate for video files, and build an encoding ladder.

PRESENTER: *Jan Ozer, Principal, Streaming Learning Center, & Contributing Editor,* Streaming Media

W5 ❚ Video Machine Learning: Customizing Solutions & Training Models

Do you want to realize maximum business value from video machine learning solutions? To do so requires customization and model training. During this workshop, we go over core concepts that will help you in your customization and model training efforts. We also take a look at various options that are in the wild and ready for you to realize value from machine learning applications for video. We wrap things up with some hands-on demonstrations and customization and training tips and tricks. You walk away from this workshop armed with knowledge on how to get started providing your business value in this exciting area of video machine learning.

PRESENTER: *Jun Heider, CTO, RealEyes Media*

W6 ❚ Discovering the Power of FFmpeg

One of the most widely used tools with video encoding and deployment processes is FFmpeg, an open-source command line utility that can read and write just about any video, audio, or subtitle codec with just about any format, container, or protocol. Starting with core command line parameters, you learn how to read video files and output in various bitrates, codecs, and containers. The workshop then moves into more intermediate-level commands with map parameters and video filters. We look at more advanced utilization of FFmpeg as well, exploring composition of two video sources with text labels and placement and setting up multiple processes to output multiple bitrates for adaptive delivery.

PRESENTER: *Robert Reinhardt, Video Solutions Architect, VideoRX, & Contributing Editor,* Streaming Media

Tuesday November 19

8:00 a.m. – 9:00 a.m.
CONTINENTAL BREAKFAST
sponsored by verizon media

OPENING KEYNOTES

9:00 a.m. – 9:45 a.m.
Keynote to be announced soon!
Check streamingmedia.com/west for updates.

9:45 a.m. – 10:00 a.m.
Sponsor Presentation MediaKind

10:00 a.m. – 10:30 a.m.
COFFEE *sponsored by* verizon media
NETWORKING AND OTT MEETUP
in the Streaming Media Showcase

10:30 a.m. – 11:15 a.m.
Business & Strategy Track
B101 ▪ Launching Original TV Content When It's Not on TV

With "television" content being more multi-platform than ever, what does an original television launch look like for a streaming service? Meet marketing and insights gurus at YouTube who help inform the launch of YouTube's original content. Learn how they identified key themes of their series, potential audiences with which to best amplify a series' relevance, and positionings to differentiate it in the market. Attendees learn what audiences want from original television, how this differs (if at all) for linear vs. streaming, and how to turn cultural insights into go-to-market strategy. Case studies/examples of this type of insight and marketing in action at YouTube are also shared.

Technical & How-To Track
T101 ▪ HOW-TO: Fine-Tuning Your Encoding With Objective Quality Metrics

Choosing the number of streams in an adaptive group and configuring them is usually a subjective, touchy-feely exercise, with no way to really gauge the effectiveness and efficiency of the streams. However, by measuring stream quality via metrics such as VMAF, SSIMPlus, and others, you can precisely assess the quality delivered by each stream and its relevancy to the adaptive group. This presentation identifies several key objective quality metrics, teaching how to apply them using commercial and open source tools and how to use them to fine-tune your adaptive bitrate ladders and encoding settings.

CONNECT:
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OTT Leadership Summit
OTT101 ▪ Subscription Fatigue: Too Much of a Good Thing?

More than 60% of U.S. households subscribe to at least one SVOD service, according to Parks & Associates; Deloitte says that the average subscriber pays for three services. As the total cost of those services approaches the cost of a cable TV bundle, might we see a reduction in subscriptions? Should we expect more bundling of SVOD services, with or without cable subscriptions? How can SVOD services prevent customer churn? Join our panel of industry experts as they discuss the implications of an increasingly crowded market.

Video Engineering Summit
VES101 ▪ The Video Engineer's Toolbox

Having the right tools for the job allows you to work smarter, not just harder. When developing for and supporting some of the biggest live streaming events such as the Super Bowl, Olympics, and the World Cup, we have beefed up and refined the arsenal of tools we bring. This session covers some of the tools to monitor, debug, and identify to solve problems quickly and effectively for live and on-demand streaming content, then dives deeper into some key, often overlooked use cases.

Esports & Sports Streaming Summit
ESS101 ▪ Big Moves From the Big Leagues

Some of the most interesting innovations are coming from the biggest names in traditional sports. The major sports leagues see the writing on the wall, which is why they're creating new experiences for fans, doing more with live video, and betting heavily on esports. As we begin the conference, we'll let the big dogs take the lead.

Live Streaming Summit
LS101 ▪ Bringing Convenience to Corporate Streaming

While social media and entertainment get most of the attention when it comes to live streaming, it's just as crucial to B2B and internal corporate communications. This panel of experts discusses how to effectively and efficiently connect to all of your internal viewers while also being able to scale for an external audience, as well as the myriad technologies that can be used from capture to distribution.

Discovery Track
DT101 ▪ Discovery Track Session

11:30 a.m. – 12:30 p.m.
Business & Strategy Track
B102 ▪ Risk & Decision: The Insider's Guide to Avoiding Disaster When Building a Video Service

Launching an OTT service or creating a video delivery platform isn't a simple undertaking. There are myriad considerations regarding technology, business model, content licensing, and more. But nothing can derail a promising video offering more than not knowing what's waiting around the next corner to challenge getting to market. In this presentation, you learn about some of the critical challenges facing streaming services today. Aggregating survey responses from across the Streaming Video Alliance membership, this presentation shares some of these challenges, how to address them, and the risk they pose to undermining your efforts to provide viewers a great video experience.

Technical & How-To Track

T102 ▮ Engineering a Modern Super Bowl Streaming Workflow From the Ground Up

This presentation details all the components of the end-to-end video streaming workflow used to stream Super Bowl 53 across both the CBS Sports & CBS All Access platforms. Learn how CBS Interactive set up signal acquisition, encoding for maximum reliability and visual quality, ad workflow, and private network interconnects for delivering content to origins in multiple locations and how a multi-CDN strategy was implemented, including the importance of doing CDN decisioning in a manner that can react to real-time changes in network conditions.

OTT Leadership Summit

OTT102 ▮ Fireside Chats: Finding New Audiences

Reaching Generation Z
Consumers' video consumption habits are changing dramatically. Generation Z watches video in a completely different way than older generations, and it's imperative that we reach them on their terms, with the type of content they want, in the formats that speak to them, on the devices they prefer. In this fireside chat, we talk with an executive from Awesomeness TV about what works—and what doesn't—with the next generation of consumers.

Ad-Supported VOD as an Alternative to Broadcast & SVOD
Many consumers are looking for alternatives to traditional cable and SVOD services, as well as skinny bundles that aren't so skinny after all. Enter free, ad-supported services that offer premium content without the premium price tag. We talk about the challenges and opportunities facing AVOD services in today's market.

Video Engineering Summit

VES102 ▮ Low Latency Live Streaming at Scale

Many streaming producers are attempting to enable viewers to interact with live streamers in relative real time through chat, Q&A, betting, bidding, and more. They all encounter the same challenge: reducing latency while syncing interactions between the live streamer and viewers. There's currently a race between WebRTC-based approaches, which are very low in latency but hard to scale, and HTTP-based approaches, which are easy to scale but higher in latency. Neither is ideal. This session details approaches to achieving interactivity at scale using existing technologies.

Esports & Sports Streaming Summit

ESS102 ▮ Focus on Fans

Increasing Fan Engagement
Streaming live video is just the beginning. To succeed today, it's crucial to engage fans and keep them tuning in. Putting out a tune-in message isn't enough anymore. You've got to get fans invested in the next match, engaging them on multiple platforms. Here's how some leagues cater to their fans to create all-new experiences and lifelong engagement.

The Next Generation
Don't assume that young people today are going to watch the same sports that their parents follow. Young viewers are up for grabs, as the traditional sports world undergoes massive changes. Will today's young viewers grow up loving basketball and football, or will esports eventually dominate? Here's how leagues are securing the next generation.

Live Streaming Summit

LS102 ▮ Live-Streaming Best Practices

How reliable is your live-streaming production workflow? Learn how to use and configure the essential (and purposely redundant) components of a live streaming event system, including cameras, H.264 encoders/streamers, video switchers, video signal conversion, recorders, and more. Also learn how to best deploy the live stream to your audience based on business requirements: Do you utilize free social media outlets, work with a premium third-party streaming service, or build your own live-streaming infrastructure? Learn how to approach different live scenarios with the right gear to fit the budget you have.

Discovery Track

DT102 ▮ Discovery Track Session

12:30 p.m. – 1:30 p.m.
ATTENDEE LUNCHEON

1:30 p.m. – 2:15 p.m.

Business & Strategy Track

B103 ▮ What You Need to Ask Ad Tech Vendors

Advertising is a crucial element of many streaming video services, but the technologies and services that make it work are complex and confusing. This session is designed to help the non-technical attendee understand the questions they need to ask ad tech vendors about integration, server-side ad insertion, custom client-side features, first-party data, inventory, bidding, and more.

Technical & How-To Track

T103 ▮ Microservices in Action

The discussion around microservices has moved from theory and planning to looking at optimization for deployment for streaming within a microservices/services-oriented architecture. A year ago many were thinking about deployment in this new highly available, scalable and agile way; today, it has emerged as common practice, or at the least as a common strategy. This session examines some examples of microservices in action in a discussion with leading content publishers and goes deep into some real-world microservices architectures, exploring introspection, orchestration, containerization, and wider virtualization strategies.

OTT Leadership Summit

OTT103 ▮ Understanding the DRM Lifecycle

As DRM becomes a global standard for content creators and consumers, the DRM lifecycle becomes more and more important. Implementing DRM into a complex video workflow can be a daunting task. That combined with the mandatory use of DRM for premium content leaves an OTT Operator with a lot of questions. In this session, we explore the "DRM Lifecycle" from content creation to editing to digital dailies to post to screeners and, ultimately, to consumer distribution.

Video Engineering Summit

VES103 ▮ Integrating CMAF Into a VOD Workflow

This presentation details how to implement CMAF into a VOD workflow, and how CMAF saves storage space, reduces latency, and improves cache efficiency, which leads to better performance and the simplification of content encryption.

Esports & Sports Streaming Summit

ESS103 ▮ A More Perfect Workflow: Getting Live Sports Right

There isn't just one perfect workflow for live sports; it all depends on the organization's needs and budget. This panel will take a good/better/best approach in recommending workflows for different purposes. What's the best way to handle a one-camera

setup? What's the best way to cover non-traditional sports? Our experts will guide the audience through the options.

Live Streaming Summit
LS103 ▋ Fireside Chat With Industry Leaders

Join us as we discuss the massive increase in live streaming viewership and the importance of your audience with one of the industry leaders in the tech space.

Discovery Track
DT103 ▋ Discovery Track Session

2:15 p.m. – 2:45 p.m.
COFFEE *sponsored by* verizon media
NETWORKING AND LIVE STREAMING MEETUP in the Streaming Media Showcase

2:45 p.m. – 3:30 p.m.
Business & Strategy Track
B104 ▋ Fireside Chat: The State of the CDN Market

Content delivery networks (CDNs) deliver vast quantities of data to an ever-growing, media-hungry audience. The sheer scale of operations and consumer adoption of these services is daunting. Forgotten when they work, yet in the spotlight if they fail, the CDNs have a thankless but critical role in our industry. In this session, Dom Robinson, chair of Content Delivery Summit and 25-year veteran in the CDN space, talks to executives from the leading CDNs about the state of the sector, the challenges being faced, new technology strategies, and which services are rising and falling in demand. If a CDN is a part of your ecosystem, then this broad discussion should touch on a variety of high-level topics that directly affect your business.

Technical & How-To Track
T104 ▋ Open Source Streaming

In this session, we review every stage of the live- and on-demand streaming workflow and explore how open source options can be used in real-world implementations. We'll examine tools such as FFmpeg, VLC, and NGINX, as well as open source codecs, and discuss our panelists favorites for solving specific challenges, the pros and cons of each, and compare them to some commercial offerings. While this session is of use for technicians and developers, the emphasis is on higher-level strategic questions about where and when open source tools can replace commercial offerings and thus reduce costs.

OTT Leadership Summit
OTT104 ▋ Fireside Chat: TV Everywhere at Cox Media

Cox Media is the third-largest cable entertainment and broadband services provider in the U.S. In this fireside chat, we talk with Cox's senior manager of product management and development about the business and technical challenges of launching a TV Everywhere/OTT service, and how traditional media companies are positioned to succeed in the space.

Video Engineering Summit
VES104 ▋ Evaluating & Testing CDN Suppliers for Performance & Unit Economics

This discussion details how video engineers should set up their CDNs for optimal delivery around the world. From multi-CDN to optimizing encoding and transcoding efforts, we provide actionable recommendations based on real, unbiased testing. Attendees walk away with insights regarding how to optimize their CDN(s) for media delivery.

Esports & Sports Streaming Summit
ESS104 ▋ The New Athletes: Stars of Esports

What's it really like to play video games for a living? What do esports stars think of their fans, colleagues, and sponsors? How on earth is this a real job? Can you make a lot of money? Like, a whole lot? In this panel, esports pros pull back the curtain and tell the truth about their profession.

Live Streaming Summit
LS104 ▋ Real-Time Remote Production for the FIFA Women's World Cup

Millions of people around the world tuned in for the 2019 FIFA Women's World Cup Finals in France between the USA and Norway. After the huge success of FOX Sports' innovative broadcast of the 2018 FIFA World Cup, our panelists collaborated with FOX Sports to deliver new remote production capabilities and greater efficiencies for this year's women's final. Boasting more than twice as many streams as the 2018 World Cup, these panelists discuss how they enabled production teams in Los Angeles to begin editing multiple camera feeds within less than 10 seconds of the live action for highlights, playback, and bridge programming and employed new capabilities such as real-time direct-to-cloud archiving and more extensive—yet consolidated—monitoring.

Discovery Track
DT104 ▋ Discovery Track Session

3:30 p.m. – 4:30 p.m.
HAPPY HOUR *sponsored by* MediaKind
in the Streaming Media Showcase
Grab a drink and visit with our exhibitors in a laid-back atmosphere.

4:30 p.m. – 5:15 p.m.
Business & Strategy Track
B105 ▋ Optimizing Corporate Communications

From delivery to improving end-user experiences, this covers how enterprises can support internal video activities at scale without harming the network. Focus is then placed on developing a secure-rich process for accessing and hosting video assets to be accessed by employees and stakeholders. This also includes covering value adds for end users, including using artificial

intelligence to make content more accessible and discoverable through automated processes.

Technical & How-To Track

T105 ▌ ATSC 3.0: What You Need to Know

The promise of ATSC 3.0 is the ability to multicast not only audio and video, but data as well. If ATSC 3.0 can achieve this, plus allow for targeted personalized advertising, the broadcast world will have combined the digital promise of targeting with the scale of broadcast, essentially changing the broadcast vs. streaming playing field. How will this work with legacy CDNs and new 5G pipes? What does broadcast-as-a service mean? How do converged OTT-OTA apps work in the future? How does this help deliver the right content to the right audience?

OTT Leadership Summit

OTT105 ▌ Who Cares About Sports & News?

As video offers proliferate, many have purely on-demand content while others include live programming. Understanding the nuances of consumer interest in live video, especially sports and news, is critical to securing content rights, designing offers, and targeting subscribers. For many consumers, interest in a favorite team or athlete is the primary driver for their live video subscription, while other consumers have virtually no interest in sports or traditional news and often find little value in live TV. This session explores findings from a new consumer survey from Altman Vilandrie & Co., including a deep dive into reasons for consumer adoption of live TV offers, and a panel discussion featuring top executives from the TV industry.

Video Engineering Summit

VES105 ▌ Applications of Per-Title Encoding

Per-title encoding techniques have progressed from theory to reality with real-world statistics to verify effectiveness. In this roundtable, panelists discuss how their technologies work and the overall impact on their encoding ecosystem and share case studies about how per-title encoding has saved bandwidth and/or improved quality of experience.

Esports & Sports Streaming Summit

ESS105 ▌ Technology and the In-Stadium Experience

Advances in streaming and sports tech don't just benefit the home viewer. Fans at the arenas, in the stadiums, and on the links are enjoying plugged-in, app-based enhancements as well. Learn from broadcasters that have created stadium-based app and mobile web experiences that enhance, not detract from, the live moment.

Live Streaming Summit

LS105 ▌ Scaling for the Demands of a Growing Live Audience

As more people are turning to streaming as their main source of content, companies are dealing with the necessity of scaling quickly. On top of this, everyone is viewing from many devices, each with a specific set of quality specifications. With many viewers now getting their live events and sports coverage almost exclusively from streaming services this panel discusses the necessary tools to ensure a successful viewing experience.

Discovery Track

DT105 ▌ Discovery Track Session

5:30 p.m. – 7:00 p.m.
NETWORKING RECEPTION

Relax and unwind after a full day of sessions. Our evening reception is the perfect place to network with industry peers while enjoying a drink and some tasty bites. Open to all attendees, speakers, and exhibitors.

Wednesday November 20

8:30 a.m. – 9:00 a.m.
READERS' CHOICE AWARDS BREAKFAST
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KEYNOTE

9:00 a.m. – 10:00 a.m.
The Next Generation of Sports Streaming

MODERATOR: *Kiran Paranjpe, Head of Sports & Entertainment/ Global Partnerships, Google, Inc.*

PANELISTS: *Brendan Reiley, Director, Revenue Operations, NASCAR Digital Media; Rich Robinson, SVP, Digital, World Surf League; additional panelists TBA*

Advanced TV has opened up a new world of possibilities when it comes to the sports viewing experience. This includes new direct-to-consumer (DTC) platforms that let fans watch anytime or anywhere, second-screen experiences that complement the TV and in-person viewing experience, and more personalized content and ads that are relevant to the viewer. Whether you're watching from the stands, from the couch, or on-the-go, new technology is delivering a heightened sports viewing experience for fans everywhere. In this session, Kiran Paranjpe moderates a roundtable of digital executives from sports organizations to discuss their successes and strategies launching and growing DTC platforms. Topics include streaming technology decisions, subscription vs. advertising revenue models, regional vs. global distribution models, and marketing DTC services effectively.

10:00 a.m. – 10:30 a.m.
COFFEE *sponsored by* **verizon media**
NETWORKING AND ESPORTS & SPORTS STREAMING MEETUP
in the Streaming Media Showcase

10:30 a.m. – 11:15 a.m.
Business & Strategy Track
B201 ▎ UX: Keep Viewers Happy
What delights viewers and keeps them engaged when it comes to the video user experience (UX)? This panel discusses the trends media companies are following when it comes to creating a one-click environment, moving customers through a registration or transaction process, or simply structuring navigation so content can be more easily found. Are text-based navigation systems a bad idea? What about removing the program guide? If customers churn early and often when they're not happy, what will keep viewers happy?

Technical & How-To Track
T201 ▎ HOW-TO: Playout in the Cloud
This presentation will fundamentally shift the way attendees think of playout in the cloud. Rather than building a schedule and expensively re-encoding assets in real time for broadcast, learn how to decouple the monolith of playout software into discrete components on top of AWS services. The approach discussed will open new possibilities of channel customization, personalization, and end-user quality, while also dramatically reducing running costs.

OTT Leadership Summit
OTT201 ▎ How Niche Video Services Can Find Success
Netflix, Prime Video, Hulu, and other entertainment giants get most of the attention, but that doesn't mean there's not a place for niche services to not only survive, but thrive. It's all about knowing your audience—not just creating a great video offering but building communities that deliver content of all kinds and invite user interaction and participation in curating the channels they've always wanted.

Video Engineering Summit
VES201 ▎ Controlling QoE With Better Data
Quality of experience (QoE) is critical to all successful streaming services. Using worldwide benchmark data, this talk identifies the most important QoE KPIs for VOD services and discusses their regional impact. For example, in the U.S., buffering issues drive user churn, while in Asia, managing device fragmentation is key. It also reviews a number of metrics, explores benchmark data, and details how to best understand and leverage the relationship between QoE and data.

Esports & Sports Streaming Summit
ESS201 ▎ Live Streaming in Challenging Conditions
Not long ago, going live from a remote location meant driving up with a satellite truck. Well, those days are over. Today's publishers are delivering live streams from challenging remote locations that a truck could never reach. These producers make it look easy, but it's not. Learn how to overcome any obstacle.

Discovery Track
DT201 ▎ Discovery Track Session

11:30 a.m. – 12:30 p.m.
Business & Strategy Track
B202 ▎ Connecting the Dots for Connected TV Advertising
Study after study shows increased viewing for all OTT services on the TV screen, and not just SVOD services. In fact, ad-supported services are growing in number, leading to an increase in connected TV ad inventory. If you're an ad buyer, how do you take advantage of this growing source of addressable ad inventory? If you're a provider with inventory, how do you connect with the buyers? What are the issues with connected TV advertising, and how are they being addressed? Join this panel representing both the supply and demand sides, as well as content services and platforms, for answers.

Technical & How-To Track
T202 ▎ Multicast: Has Its Time Finally Arrived?
IP multicast is 31 years old this year. This session takes a rapid tour through multicast's history; looks at some deployments and their successes and failures; and examines the emergence of IPTV, operator CDN, and application-layer P2P models. It then looks at why multicast adoption has been difficult, along with some of the technical and commercial challenges it has faced. Finally, it looks to the future and the re-emergence of interest with the hot new technologies in the space, including multicast-ABR, LTE-B, and BIER.

OTT Leadership Summit

OTT202 ▪ 2019—The Year of Direct-to-Consumer Video Services?

As Disney, WarnerMedia, Apple, and NBCUniversal prepare to launch direct-to-consumer (DTC) services–joining existing ventures like ESPN+, CBS All Access, and DC Universe–will existing SVOD and live-linear services like Netflix, Hulu, and Amazon Prime be able to compete? Or will the DTC offerings falter against the incumbents? This session examines the pros and cons of DTC services and evaluates the likelihood of success in the crowded OTT landscape.

Video Engineering Summit

VES202 ▪ Hardware Transcoding Solutions for the Cloud

Hardware codecs in FFmpeg, like those from Intel and NVIDIA, deliver significant performance gains over x264/x265, but have a reputation for lower quality and use a completely different command set. This session benchmarks the performance and quality of these codecs and details the FFmpeg command syntax. Attendees learn when and how to use these hardware codecs in VOD and live encoding workflows.

Esports & Sports Streaming Summit

ESS202 ▪ Moneyball: Monetizing Your Assets

Betting on the Future

Wagering and interactivity are about to become big parts of the streaming sports experience, whether that means adding on-screen trivia quizzes to keep fans engaged or betting for real money on a game's outcome. Hear from the architects of our gambling future as they chart out a path for integrating bets and sports viewing.

Doing Sponsor Integrations Right

In the days of ad skipping, sponsors want to create unskippable moments that put their products in a good light. As plenty of brands have found, viewers will welcome branded integrations when they're done the right way. Here's how to create authentic moments that fit in with the action, pleasing sponsors and viewers alike.

Discovery Track

DT202 ▪ Discovery Track Session

12:30 p.m. – 1:30 p.m.
LUNCH BREAK ▪
A chance to visit the Streaming Media Showcase

1:30 p.m. – 2:30 p.m.
Business & Strategy Track

B203 ▪ Video Machine Learning Demystified

Do vendor machine learning models not get the gist of your video? If so, it's time to create a custom model. Don't worry if you're not a data scientist. These days, there is a growing number of solutions available for everyone. During this session, we take a look at some of these solutions, talk through what it takes to use them, and discuss some tips and tricks to keep in mind as you do. By the end of this session, you should feel empowered to start tinkering even without contemplating a data science degree.

Technical & How-To Track

T203 ▪ HOW-TO: Latency, Real-Time Streaming, & WebRTC

Is latency impacting your customers' experiences and your business? The good news is sub-second latency is within reach. In this session, you learn about WebRTC, what it takes to support

it and the available APIs from MediaStream to RTCDataChannel and more, as well as the protocols that make it real time such as UDP, DTLS, SCTP and everything in-between. This session also addresses workflow best practices and implementation options.

OTT Leadership Summit

OTT203 ▪ Harness SSAI's Superpowers

Server-side ad insertion (SSIA) claims to have superpowers: the ability to replace broadcast ads with or without SCTE markers, avoidance of viewer ad blockers, more standardized integration into each platform and better targeting and personalization are the superpowers SSAI brings to the streaming environment. The evil lurking in the wings is ad server ability to dynamically scale, mistaking true scale for fraud and getting standardized measurements to your partners. We also touch on reach, frequency and wholistic ad strategy to arm you with information for talking to business colleagues.

Video Engineering Summit

VES203 ▪ How to Customize Encoding, Packaging, & DRM for All Target Formats

Consumer devices have many different operating systems, firmware, and chipsets, which often require different codecs, packaging formats, and DRM schemes. To achieve optimal QoE for all viewers, distributors should customize delivery for each device. This session details how companies can leverage intelligence built into technology to understand the differences between platforms and automatically modify content as it's delivered to achieve optimal QoE while minimizing encoding, packaging, and storage costs.

Esports & Sports Streaming Summit

ESS203 ▪ Overtime: Here's What's Next

The 5G Future

5G's arrival has begun, and it will mean big improvements for sports streaming. Eliminating latency and making real-time wagering possible are just the beginning. With data limits no longer an issue, sports leagues are free to create new ways of bringing fans into the action. Will the connected experience finally beat broadcast?

Playing in VR/AR/360°

There's a lot of experimentation going on with new technologies and sports. Leagues are letting fans create their own streams, select their own camera angles, dig into stats at any time, and put themselves in the experience with AR and VR. So how's that working out? Which experiments have fans responded to?

Discovery Track

DT203 ▪ Discovery Track Session

2:30 p.m. – 3:00 p.m.
COFFEE *sponsored by* verizon media
NETWORKING, AND VIDEO ENGINEERS MEETUP in the Streaming Media Showcase

3:00 p.m. – 3:45 p.m.
Business & Strategy Track

B204 ▪ Mixed Realities: VR, AR, & XR

Consumers were supposed to pioneer "extended reality" (XR), the umbrella term for virtual reality (VR) and augmented reality (AR). Instead, things took an unexpected turn: Corporations and universities are leading the way for training, learning, and conferencing use cases. These experiences entail streaming a wide range of large media assets including video, images, audio,

and 3D objects. This session features a discussion with one of the leading XR labs in the United States.

Technical & How-To Track

T204 ▌ 5G & the Future of Streaming

5G marks a new era of cellular network connectivity. In this presentation, Jon Landman, VP of sales at Teradek, describes how 5G will make a difference for live streaming. Learn how you can use 5G to optimize your connectivity for more reliable broadcasts. Explore what exactly is 5G and how it differs from our current 4G LTE networks. Discover how you can combine 5G connectivity and HEVC compression to deliver higher-quality video while using less bandwidth.

OTT Leadership Summit

OTT204 ▌ Addressable TV: How Close Are We to Finding the Holy Grail?

From the beginning of the online video revolution, personalized video has been one of our loftiest and hardest-to-achieve goals. This session examines the state of addressable television for both content distributors and advertisers today, as well as what we can expect in the near future and what sort of privacy and data collection issues pose challenges to truly personalized video delivery.

Video Engineering Summit

VES204 ▌ LCEVC: The Latest MPEG Standard

Heard of MPEG-5 part 2 (LCEVC)? And EVC? VVC, AV1, AVS2? Anyone getting an acronym headache? Alongside VP9 and HEVC, these next-generation standards are vying to be the successor to H.264, but will there ever be a single leader again? With the single-standard, single-resolution media delivery chain broken, operators and service providers are looking for the best tool for the job in every part of their ecosystem. Compression experts from Facebook and V-Nova discuss the reasons why and reveal some of the secrets of the latest standard in the MPEG family, LCEVC—a low-complexity enhancement for all codecs, even non-MPEG ones.

Esports & Sports Streaming Summit

ESS204 ▌ Niche Sports Find a Home

In the online video world, there's no such thing as niche. Formerly remote events are now as close as a cellphone. Viewers are discovering a range of unusual events like they haven't seen since The Wide World of Sports, and they can't get enough. Here's how several niche sports used online video to tap into a worldwide audience.

Discovery Track

DT204 ▌ Discovery Track Session

CLOSING KEYNOTE

4:00 p.m. – 4:45 p.m.
Keynote to be announced soon!
The Streaming Media West 2019 closing keynote is our final opportunity to gather together. Speaker and session details will be announced soon. Please check streamingmedia.com/west for updates.

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November 19-20, 2019

INCLUDES ACCESS TO:

- Streaming Media West Conference Sessions
- OTT Leadership Summit
- Video Engineering Summit
- Esports & Sports Streaming Summit
- Live Streaming Summit
- Keynotes
- Discovery Track
- VIP Mixer
- Networking Reception
- Awards Breakfast
- Streaming Media Showcase

$995

Early Bird Rate only
$895 *(ends 10/18)*

2 EASY WAYS TO REGISTER

1 GO TO **streamingmedia.com/west**
When registering on the website, please refer to the promo code above your name on your mailing address label.

2 PHONE:
(800) 300-9868 or
(609) 654-6266

Additional Pass Options

	By 10/18	After 10/18	Sessions for Selected Event	Keynotes	Discovery Track	VIP Mixer	Networking Reception	Awards Breakfast	Showcase
OTT Leadership Summit November 19–20	$695	$795	x	x	x	x	x	x	x
Video Engineering Summit November 19–20	$695	$795	x	x	x	x	x	x	x
ESports & Sports Streaming Summit November 19–20	$695	$795	x	x	x	x	x	x	x
Live Streaming Summit November 19	$495	$595	x	x	x	x	x	x	x
Streaming Media University November 18	$295*	$325*	x			x			x
Discovery Pass November 19–20	$295	$325		x	x		x	x	x
Showcase Only November 19–20	$95	$105							x

Priced per workshop

GENERAL INFORMATION

All Conference Registrations Include:

- Access to keynotes, conference sessions, and networking opportunities *(subject to pass selected)*
- Light continental breakfast and morning and afternoon coffee breaks
- VIP Welcome Mixer on Monday evening
- Admission to the Streaming Media Showcase including the Tuesday Happy Hour
- Access to the conference-wide Reception on Tuesday evening
- *Streaming Media* Magazine's Readers' Choice Awards Breakfast on Wednesday morning

Location Information

The Westin Bonaventure Hotel & Suites
404 South Figueroa Street, Los Angeles, CA 90071

Hotel Accommodations

Discounted guest room rates of $240 for a single or double room (plus applicable taxes and fees) at the Westin Bonaventure Hotel & Suites have been arranged for attendees who book through Meeting & Travel Consultants, Inc. (MTC), the official housing bureau. Rates are exclusive through MTC and will NOT be extended by the hotel directly. Rates will remain in effect until November 1, 2019, subject to availability. Early booking is suggested; credit card information is required to confirm all reservations. All Marriott Bonvoy guests receive complimentary in-room wireless Internet.

Make your hotel reservation today!

ONLINE: www.mtcreservations.com
EMAIL: bookit@mtcreservations.com
PHONE: 732-549-3985/3986 or toll-free at 866-549-3985

SM

streaming media west

the business and technology of online video

November 19-20, 2019

**The Westin
Bonaventure
Los Angeles, CA**

➤ **Top 10 Reasons YOU NEED Streaming Media West!** ◂

1. A UNIQUE ONCE-A-YEAR OPPORTUNITY. Streaming Media West is the world's leading streaming media event. There is simply no other conference with this kind of thought leadership, networking, and practical advice and training.

2. UPGRADE YOUR SKILLS. With in-depth workshops and 7 tracks of content, you have your choice of sessions. You'll walk away with career—and organization—changing strategies and skills.

3. VALUE FOR YOUR MONEY. With our intensive conference schedule and our unique gathering of experts, you will have access to knowledge and expertise that is worth its weight in gold.

4. MEET EXPERTS, INFLUENCERS, AND PEERS FACE-TO-FACE. Here's your chance to "find your tribe." The people at Streaming Media West do what you do. Meet new people, share experiences, and learn from each other.

5. SPREAD THE IMPACT. The things you'll learn at Streaming Media can have impact all over your organization. Bring your team to take advantage, or share what you've learned and get ready for positive change.

6. BREAK OUT OF EVERY-DAY EXECUTION MODE. Sometimes we all need to get out of the office and learn from the experience of others. It doesn't hurt to have a good time while you're doing it either.

7. SAMPLE AND COMPARE TOOLS AND SOLUTIONS. The top technologies and solutions are on display at Streaming Media West. This is the easiest way to see them all at one time and find what's best for you.

8. EVOLVE. Keep pace with the rapid rate of change in this business. See where the world of online video is going and how to get there first.

9. HEAR FROM INDUSTRY LEADERS. You'll hear innovative approaches from the world's leading companies during sessions and keynotes.

10. RELAX, RECHARGE, AND HAVE FUN. Join us for our receptions and enjoy dinners or a night out in Los Angeles with your colleagues, peers, and the new friends you'll make at Streaming Media West.

STREAMINGMEDIA.COM/WEST

**FEATURING THESE
SPECIAL EVENTS**

live streaming SUMMIT

OTT LEADERSHIP SUMMIT

Video Engineering Summit

STREAMING MEDIA UNIVERSITY

ESPORTS & SPORTS STREAMING SUMMIT