2021
ENGINEERING
EMMYS®
Television Academy

2021

ENGINEERING EMMYS®

OCTOBER 21, 2021

HOSTED BY **KIRSTEN VANGSNESS**

Television Academy

MESSAGE FROM THE CHAIRMAN & CEO

It's great to be with you to celebrate the 73rd Engineering Emmy Awards.

Every Emmys ceremony has memorable moments; this year is rewarding because we are welcoming a live, in-person audience after an all-remote event in 2020.

But as rewarding as it is, this isn't just the Television Academy's night. Nor is it only the industry's Sci-Tech community's night — though if you said that, you'd be getting warmer. Emmy night is for everyone who loves television — whoever you are, wherever you are and however you're watching.

And that's a lot of people, especially at a time when television has become such an integral part of our lives, providing information, entertainment and comfort like never before.

When it comes to programming, television is a big tent, and with so many platforms producing so much outstanding content, it's only getting bigger. So who better to receive this year's Charles H. Jenkins Lifetime Achievement Award than Reed Hastings, cofounder and CEO of Netflix, who began revolutionizing how the world is entertained in 1997, when he conceived the idea of a subscription-based movie-rental service.

A decade after Netflix began distributing DVDs through the mail, Reed positioned the company to significantly affect the state of television technology and engineering by developing, advancing and utilizing the nascent, game-changing technology of internet-delivered streaming media.

How did that turn out *vis-à-vis* the Emmys? In 2013, Netflix made history as the first streaming platform to earn a Primetime Emmy Award nomination for original content with *House of Cards*, and at this year's Creative Arts presentations and the 73rd Emmys telecast, Netflix outdistanced all other platforms with the most wins.

Congratulations also to Dolby Laboratories, recipient of the Philo T. Farnsworth Corporate Achievement Award. Since its founding in 1965 by Ray Dolby, it has been a significant innovator and contributor to the television industry in audio and imaging technology.

Finally, to all of tonight's Engineering Emmy Award recipients: thank you for your extraordinary work and congratulations on your achievements. In celebrating you, we celebrate television itself. On this Emmy night, what could be better than that?

Frank Scherma
Chairman & CEO

MESSAGE FROM THE PRESIDENT & COO

Welcome to the 73rd Engineering Emmy Awards.

In a sense, the Emmys are television's family reunion, and there's a place at the table for everyone — not only for the nominees and our industry colleagues but for devoted TV viewers around the world. Which is only fitting, because television is a more important part of all our lives than ever in our current historical moment when people have been spending more time at home due to Covid-19.

Although the pandemic slowed production temporarily, the uptick this year has been a welcome development. At the Television Academy, we are encouraged by this shift, as it marks both a positive trend for the industry and more opportunities for our members to use their talents.

Our industry is only as strong as its people, which is why the Television Academy and the Television Academy Foundation are committed to supporting working professionals and opening doors for the next generation from all backgrounds.

If you are a qualified professional who is not yet an Academy member, we encourage you to apply to our new Science & Technology Peer Group. This new peer group provides a membership base for the engineers, scientists and technologists who create the systems and devices that enable or advance the storytelling and transmission capabilities of television. This may include advancements in software and equipment for visual and audio clarity, distribution methodology and approach, and/or engagement and participation of the viewer with the television program itself.

Benefits include networking mixers, professional development seminars, a subscription to *emmy* magazine, discounts on an array of goods, services and experiences and much more — including, for eligible members, the ability to vote in the annual Emmy Awards competition. For more information, please visit TelevisionAcademy.com.

The Television Academy Foundation is dedicated to forging paths for young people seeking to break into the industry — especially those from diverse and low-income backgrounds — through such initiatives as the Internship Program, which offers college students internships and fellowships in more than twenty television disciplines. Its alumni include prominent writers, producers, directors and executives, including several Emmy winners. A more recent program, the College Television Summit, is a three-day conference in which Emmy winners, media innovators and other industry leaders share valuable insights and strategies with students to help kickstart their careers.

By helping to strengthen the present and build bridges to the future, we hope to cultivate a thriving, diverse, multigenerational community that will lead our industry for generations to come.

That sense of community — call it the television family — is especially powerful on Emmy night, and we hope you feel it as strongly as we do.

Maury McIntyre
President & COO

2021 ENGINEERING AWARDS COMMITTEE

John Leverence, Chair

COMMITTEE MEMBERS

Wendy Aylsworth

Stuart Bass, ACE

Bob Bronow, CAS

Jeff Calderon

Jim DeFilippis

Greg Gewickey

David Ginsberg

Frank Morrone, CAS

David Plakos

Jeffrey Riedmiller

Michael Ruscio

Leon Silverman

Derek Spears

David Stump, ASC

Craig Weiss

Barry Zegel

TONIGHT'S HOST

KIRSTEN VANGSNESS

Kirsten Vangsness is best known for playing tech-kitten Penelope Garcia on the 15 seasons of the CBS crime drama *Criminal Minds*, for which she also co-wrote five episodes, including the series finale.

She is on the Art Board at Hollywood's Theatre of NOTE, where she has acted in and created many plays, including *Mess* (which author Neil Gaiman called his "favorite one-person show"), and her feminist time-travel musical *Cleo, Theo & Wu*. In 2019, Kirsten took both productions to the Edinburgh Fringe, where she and her fellow NOTE actors played to sold-out houses for a blissful month.

Kirsten is the star and executive producer of the film-noir spoof *Kill Me, Deadly*; she wrote, directed and starred in the animated film festival darling *Curtains*; and she can be heard as Nico, the lovable lesbian-fox-alien in the last two seasons of the improv podcast *Voyage to the Stars*.

Kirsten just started production on season three of *Kirsten's Agenda*, a YouTube series she creates about art and self-actualization. She is the recipient of the Human Rights Campaign Visibility Award, the Open Fist Excellence in Arts Award, the L.A. Drama Critics Award for Best Actress and she has a monkey enclosure named after her at the Wildlife Learning Center in Sylmar.

In her spare time, she leads spirit tastings at Santa Ana's Blinking Owl Distillery, which she co-owns.

You can learn more about her goings-on at kirstenvangsness.com.

ENGINEERING EMMYS®

Engineering Emmys are presented to an individual, company or organization for developments in engineering that are either so extensive an improvement on existing methods or so innovative in nature that they materially affect the production, recording, transmission or reception of television.

This year's Engineering Emmy Award recipients are:

TERADEK

TERADEK BOLT 4K

Nicolaas Verheem, Marius van der Watt, Dennis Scheftner, Zvi Reznic

Teradek Bolt 4K is a zero-delay wireless video transmission system for on-set monitoring, offering high-quality wireless video so reliable and so well integrated into the workflow that the wireless device itself seems to disappear. Bolt 4K has been critical in implementing changes needed to support social distancing protocols. Today, over 40,000 Bolt transmitters and 60,000 Bolt receivers are working in the motion picture and broadcasting industry — owned by Steadicam operators, digital-imaging technicians, drone pilots, production companies and rental houses — to keep up with the demands of production crews large and small. For his contribution to this accomplishment, Teradek would like to give special recognition to Professor Meir Feder, holder of the prestigious Information Theory Chair, and Head of Center for Artificial Intelligence and Data Science at Tel-Aviv University's School of Electrical Engineering.

For more information, please visit teradek.com/pages/bolt4k.

AUTODESK® **ARNOLD**

ARNOLD GLOBAL ILLUMINATION RENDERING SYSTEM

Marcos Fajardo, Alan King, Thiago Ize

Arnold is a photo-realistic Monte Carlo ray tracing renderer used by many of the best visual-effects and animation studios in the world. Countless cinematic moments, binge-worthy television series and commercials have relied on Arnold over the years. Taking an artist-friendly approach, Arnold faithfully simulates the light transport equation at render time, without relying on problematic caching or baking methods. Extensive scientific research, as well as algorithmic, system and low-level optimizations were required to reduce memory usage and render time.

For more information, please visit autodesk.com/products/arnold/overview

CEDAR STUDIO
CEDAR Audio Ltd.

CEDAR Studio was developed specifically to meet the needs of audio professionals in the field of film and television postproduction. Originally comprising four processes, it has grown to provide a wide range of tools for cleaning and restoring audio. These include the industry-standard DNS One and DNS Two dialogue noise suppressors, as well as Retouch, the process that introduced spectral editing to the world. CEDAR Studio allows users to eliminate a wide range of problems and provides unsurpassed results quickly and with minimum fuss and user intervention.

For more information, please visit cedar-audio.com

ARRI SKYPANEL
ARRI

SkyPanel is a family of four LED soft lights with a design focus on reliability, color rendition and output. Built on more than a decade of research and development of LED technology, SkyPanel represents the state-of-the-art of digital luminaires. Since its start in 2015, SkyPanel set a new standard for the industry. It is available in several sizes: the S30, S60, S120, and S360 — making it the perfect fit for different creative ideas. With continuous feature development and more than 30 types of accessories to ensure the application in all needs, it changed and optimized workflow, leaving more space for creativity. Fully tuneable, correlated color temperature is adjustable between 2,800 K and 10,000 K, with excellent color rendition, built-in effects and smooth dimming down to zero percent. This makes SkyPanel a soft light redefined.

For more information, please visit arri.com.en

SCRIPTATION
Steve Vitolo, Felipe A. Mendez P., Franco Zuccar

Scriptation revolutionizes the production process by using proprietary algorithms that compare, analyze and transfer PDF annotations between script revisions. Available as a universal app for Apple devices, Scriptation transforms traditional tasks into efficient and environmentally conscious workflows, enabling entire productions to go paperless. Scriptation's custom data-parsing algorithms extract scene, character name and dialogue data from scripts to power a suite of innovations, including a mobile-optimized script-reading mode, a lining toolkit and shareable annotation layers, which empower teams to collaborate on scripts in entirely new ways. These engineering achievements have elevated Scriptation's adoption within

every department on-set and off, creating an essential solution for remote collaboration and paperless practices. Scriptation has been used on thousands of productions worldwide, including the Emmy-winning series *Saturday Night Live, black-ish* and *Game of Thrones.*

For more information, please visit scriptation.com.

V-RAY
Chaos

Chaos's V-Ray is a physically based rendering and adaptive ray tracing solution used to create photorealistic visual effects in episodic production since 2003. Optimized to handle large production scenes, V-Ray is used to render digital environments, digidoubles, creatures, vehicles and more in a highly efficient way. By accurately calculating global illumination and the distribution of light, as well as the physical properties of any material, the software ensures a seamless blend of real and virtual elements on-screen.

V-Ray projects include *Game of Thrones, Lost in Space, Stranger Things, Westworld* and *Star Trek: Discovery.*

For more information, please visit Chaos.com

GOLAEM CROWD
Golaem

Golaem products help artists populate television shows, films and game cinematics in minutes by animating thousands of characters in real time with complete artistic control.

Golaem Crowd gives artists the power to generate and animate a large number of characters with various styles and morphologies thanks to advanced behavior building blocks such as procedural animation, path-planning and navigation as well as physics, hair/fur and cloth simulation.

Golaem Layout enables artists to easily retake or layout a scene just by moving characters on the fly in their scenes with the help of procedural tools adapting their feet to the ground or adding variety in their appearance and animation. With Golaem Layout, artists always get the last word, as they can choosea custom appearance for a character at any time or manually retake the animation.

Golaem tools are used on all kinds of projects from the smallest to the most famous and daunting ones. They have been widely acclaimed as an enabler to reach the director's creative vision on a competitive time and production budget.

For more information, please visit goalem.com

MASSIVE

Stephen Regelous

Massive is the groundbreaking digital crowd-simulation software originally created by Stephen Regelous for Peter Jackson's *The Lord of the Rings* film trilogy and subsequently used on hundreds of film and television productions from Pixar's *WALL•E* and BBC's *Dr. Who* to *Game of Thrones, Avengers: Endgame* and *Shang-Chi* and the *Legend of the Ten Rings*.

In Massive, the characters — or "agents" in AI terminology — can be fully autonomous, making their own decisions and reactions based on what they see and hear around them. This is what has allowed for such epic and chaotic scenes as the Pelenor Fields in *Return of the King*, and the climactic Battle of Winterfell in the final season of *Game of Thrones*.

For more information, please visit massivesoftware.com.

THE PHILO T. FARNSWORTH AWARD HONORS AN AGENCY, COMPANY OR INSTITUTION WHOSE CONTRIBUTIONS OVER TIME HAVE SIGNIFICANTLY IMPACTED TELEVISION TECHNOLOGY AND ENGINEERING.

DOLBY LABORATORIES

Recipient of The Philo T. Farnsworth Award

A name synonymous with unforgettable entertainment experiences, Dolby Laboratories empowers creatives to elevate their stories and offers incredible experiences in Dolby for billions of people around the world. The culmination of these efforts has led to significant technological advances in both audio and imaging that have had a profound impact on the television industry.

Accolades include revolutionizing how audio is delivered over broadcast, streaming and physical disc distribution through the company's latest audio codecs, along with more recent advancements in areas such as immersive audio and high-dynamic-range (HDR) imaging. This includes Dolby Atmos, an immersive audio solution widely adopted by television creatives, along with breakthrough advancements in picture quality such as Dolby Vision, which brings entertainment to life through incredible brightness, contrast, color and detail.

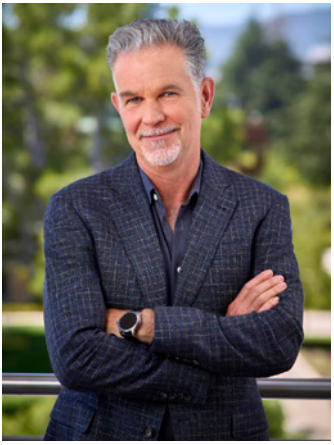
Today, the world's top creatives and streaming platforms are choosing to release their most cherished content in Dolby, including many past and current Emmy winners or Emmy-nominated shows. Dolby Vision and Dolby Atmos are not only accessible in high-end home theater systems, but available in a wide variety of devices — such as smartphones, TVs, PCs, tablets and more — that are making access to great audiovisual experiences easier than ever.

ENGINEERING EMMYS®

These are but a few samplings of the company's latest innovations from the past 50-plus years that have transformed television.

For more information, please visit dolby.com.

THE CHARLES F. JENKINS LIFETIME ACHIEVEMENT AWARD HONORS A LIVING INDIVIDUAL WHOSE ONGOING CONTRIBUTIONS HAVE SIGNIFICANTLY AFFECTED THE STATE OF TELEVISION TECHNOLOGY AND ENGINEERING.



REED HASTINGS

Recipient of The Charles F. Jenkins Lifetime Achievement Award

Reed Hastings is an entrepreneur who has revolutionized entertainment since co-founding Netflix in 1997, serving as its chairman and CEO since 1999. His first company, Pure Software, was launched in 1991 and acquired just before Netflix was launched.

An active educational philanthropist, Hastings served on the California State Board of Education from 2000 to 2004. He is currently on the board of several educational organizations, including KIPP and Pahara. He is also a board member of The City Fund.

Hastings received a B.A. from Bowdoin College in 1983 and an M.S.C.S. in Artificial Intelligence from Stanford University in 1988. Between Bowdoin and Stanford, he served in the Peace Corps as a high school math teacher in Swaziland.

TELEVISION ACADEMY LEADERSHIP

OFFICERS

Frank Scherma
Chairman & Chief Executive Officer

Steve Venezia, CAS
Vice Chair

Tim Gibbons
Second Vice Chair

Sharon Lieblein, CSA
Secretary

Allison Binder
Treasurer

Mitch Waldow
Vice Chair, Los Angeles Area

CHAIR'S APPOINTEES

Gloria Calderón Kellett

Robert Mills

Dawn Olmstead

Issa Rae

Vernon Sanders

Zack Van Amburg

GOVERNORS' APPOINTEES

Eva Basler

Kim Coleman, CSA

Nicole Marostica

Lois Vossen

TELEVISION ACADEMY FOUNDATION

Cris Abrego
Chair

BOARD OF GOVERNORS

Lesley Aletter
Stunts

Eva Basler
Daytime Programming

Gary Baum, ASC
Cinematographers

Bob Bergen
Performers

Daniel H. Birman
Documentary Programming

Bob Boden
Reality Programming

Scott Boyd, ACE
Picture Editors

Bob Bronow, CAS
Sound

Kathryn Burns
Choreography

Paul Button
Los Angeles Area

Jeffrey A. Calderon
Lighting, Camera & Technical Arts

Tony Carey
Producers

Rich Carter
Commercials

Mark Cendrowski
Directors

Kim Coleman, CSA
Casting Directors

Debra Curtis
Television Executives

Patrika A. Darbo
Performers

Jill C. Dickerson
Reality Programming

Janet Dimon
Animation

Jo DiSante
Television Executives

Terri Donohue
Makeup Artists/Hairstylists

Joseph H. Earle, Jr., CAS
Sound

Joel Fajnor
Animation

Ed Fassl
Sound Editors

Keiren Fisher
Production Executives

Lucia Gervino
Production Executives

Lauraine Gibbons
Motion & Title Design

Mary Guerrero
Makeup Artists/Hairstylists

Laura Guzik
Costume Design & Supervision

Erik Henry
Special Visual Effects

Regina Y. Hicks
Writers

Eileen Horta
Sound Editors

Greg Kupiec
Motion & Title Design

Bryan Leder
Professional Representatives

Christie Lyn Lugo Leigh
Los Angeles Area

Nicole Marostica
Public Relations

Howard Meltzer, CSA
Casting Directors

Rickey Minor
Music

Dorenda Moore
Stunts

Mandy Jo Moore
Choreography

Judalina Neira
Writers

David Plakos
Lighting, Camera & Technical Arts

Keith Raskin
Producers

Luke Reichle
Costume Design & Supervision

Glenn Howard Rigberg
Professional Representatives

Michael Ruscio, ACE
Picture Editors

Jeff Russo
Music

Jill Sanford
Children's Programming

Lori H. Schwartz
Interactive Media

John Simmons, ASC
Cinematographers

Halina Siwolop
Art Directors/Set Decorators

Derek Spears
Special Visual Effects

Steven Spignese
Public Relations

Michael Spiller
Directors

Chris Thomes
Interactive Media

Troy Underwood
Children's Programming

Ann Leslie Uzdavinis
Commercials

Renée Villafan
Daytime Programming

Lois Vossen
Documentary Programming

James Yarnell
Art Directors/Set Decorators

TELEVISION ACADEMY STAFF

Maury McIntyre
President & Chief Operating Officer

Heather Cochran
CFO & Executive Vice President, Business Operations

AWARDS & MEMBER SERVICES

Julie Carroll Shore
Vice President, Awards & Member Services

Karalee Vint
Senior Director, Board Relations & Member Services

Sheri Ebner
Senior Director, Awards

Liz Korda Smith
Director, Los Angeles Area Emmy Awards

Sara Guyton
Director, Awards

Victoria Smart
Director, Member Services

Barrie Nedler
Director, Customer Service

Dominque Isé
Manager, Awards & Member Services

Veronica Thompson
Manager, Awards & Member Services

Kiera Jefferson
Manager, Awards & Member Services

Rufino Cabang
Manager, Awards & Member Services

Michael Elton
Manager, Awards & Member Services

Shelly Arreola
Coordinator, Board Relations & Awards

Dylan Tucker
Coordinator, Customer Service

DESIGN SERVICES

Scott Buford
Senior Creative Director

Adam Lorber
Senior Designer

Angel Moreno
Production Manager

David Kauha
Graphic Designer

DIGITAL

Jennifer Connelly
Senior Director, Digital

Marc Wade
Executive Producer, Digital

Erwin Q. Yuson
Senior Manager, Database Administration/Website Development

Igor Varykish
Manager, Information Technology

Stefani Lombardo
Manager, Digital Projects

Gregory Krier
Information Technology Specialist

Meredith Jones
Manager, Digital Assets

Christopher Bay
Coordinator, Digital Content

EVENT PRODUCTION

Barb Held
Vice President, Event Production

Barbara Chase
Senior Director, Event Production

Ben Carter
Senior Director, Event Production

Debbie Peters
Director, Event Production

Victoria Ouellet
Senior Manager, Event Production

David Napoli
Senior Manager, Technical Services

Amy Pierce
Coordinator, Event Production

Kathy Vincelli
Theater Assistant

Timothy Kennelly
Chief Projectionist

EXECUTIVE OFFICE

Marsha Alexander
Executive Assistant to the President & COO

Ana Cruz
Executive Assistant to the CFO & Executive Vice President, Business Operations

FACILITIES

Javier Sanchez
Director, Facilities

Mario Oyarzabal
Office & Facilities Administrator

Frank Mosqueda
Office & Facilities Administrator

Fredy Maldonado
Facilities & Maintenance Technician

FINANCE

Lisa Fike
Controller

Nora Tyree
Senior Manager, Accounting

Adonis Wilson
Senior Staff Accountant

Natasha Priscilla
Accountant

Crisalis Najarro
Accounts Payable Clerk

HUMAN RESOURCES

Kisha Hollins
Director, Human Resources

Porchia Carter
Coordinator, Human Resources

Stephanie Kadlec
Receptionist

MARKETING

Susan Spencer
Chief Marketing Officer, Senior Vice President, Media & Brand Management

Laurel Whitcomb
Vice President, Marketing

Angela Peluso
Director, Talent Relations

Neha Modi
Senior Manager, Digital Communications & Marketing

Jason Sywak
Manager, Marketing

Latheleene Brown
Coordinator, Digital Communications

Kevin Giffin
Coordinator, Social Media

Analiese Yu
Coordinator, Talent Relations

Janet Kim
Marketing Administrator

PUBLICATIONS AND ORIGINAL CONTENT

Juan Morales
Vice President, Content/Editor-in-Chief

Gail Polevoi
Editor, *emmy* Magazine

Angel Thompson
Director, Video Production

Maura Weber
Managing Editor

Melissa Byers
Producer, Digital Content

Sarah Hirsch
Associate Editor

Richard Bleiweiss
Creative Direction and Design

Rose Cefalu
Photography Director

Rose Einstein
Head of Advertising and Business Development

STRATEGIC PARTNERSHIPS

Jonathan Treisman
Senior Director, Strategic Partnerships

Sam Saig
Senior Manager, Strategic Partnerships

Ileana Vior Quintanilla
Coordinator, Strategic Partnerships

TELEVISION ACADEMY FOUNDATION

Jodi Delaney
Executive Director

Amani Roland
Chief Advancement Officer

Miracle Bizira
Senior Director, Programs

Nancy Robinson
Director, Education Programs

Jenni Matz
Director, The Interviews

Adrienne Faillace
Producer, The Interviews

Jenna Hymes
Digital Projects Manager, The Interviews

Nikki Kaffee
Manager, Education Programs

Nora Bates
Production Coordinator, The Interviews

David Jimenez
Coordinator, Education Programs

Thea Domingo
Executive Assistant

Amy Harrington
Foundation/Archive Editor

Nancy Harrington
Foundation/Archive Editor

GENERAL COUNSEL

Venable LLP

PUBLICITY SERVICES

breakwhitelight

SECURITY

John R. McKillop
JRM Inc.

Vitalis Odongo
Security Guard

Robin Sherman
Security Guard