

Key Speakers at SIGGRAPH Asia 2020 Virtual

- **[Glen Keane \(Keynote Speaker\)](#)**
Director and Legendary Academy Award-winning Animator |
Creator of The Little Mermaid, Aladdin, The Beast, Tarzan, and Rapunzel
- **[Paul Franklin \(Keynote Speaker\)](#)**
VFX Supervisor & Creative Director | Double Negative
- **[Ian Failes \(Keynotes' Moderator\)](#)**
VFX & Animation Journalist | Editor of before's & after's

- **[Skip Rizzo \(Featured Sessions Speaker\)](#)**
Director of Medical VR, USC Institute for Creative Technologies

- **[Christophe Hery \(Featured Sessions Moderator\)](#)**
Research Scientist, Facebook Reality Labs
- **[Mike Seymour \(Featured Sessions Moderator & Panel\)](#)**
Co-founder, fxguide and the Motus Lab USYD
- **[Ronald Mallet \(Featured Sessions Panel\)](#)**
Director of Research, Facebook Reality Labs
- **[Melinda Ozel \(Featured Sessions Panel\)](#)**
Expression Scientist, Owner, Face of the FACS
- **[Mark Sagar \(Featured Sessions Panel\)](#)**
CEO, Soul Machines
- **[Rudy Grossman \(Featured Sessions Panel\)](#)**
Director of Production Technology, Soul Machines

- **[Doug Roble \(Featured Sessions Panel\)](#)**
Senior Director, Software R&D
- **[Darren Hendler \(Featured Sessions Panel\)](#)**
Director, Digital Human Group, Digital Domain
- **[Hao Li \(Featured Sessions Panel\)](#)**
CEO & Co-founder, Pinscreen, Inc.

- **[Abhishek Arora \(Games Speaker\)](#)**
Graphics Programmer, Naughty Dog
- **[Mari Wang \(Games Speaker\)](#)**
Cinematic Lighter, Naughty Dog

- **[Abassin Sourou Fangbemi \(Games Speaker\)](#)**
Data Scientist, Ubisoft China, AI & Data Lab
- **[Alexis Rolland \(Games Speaker\)](#)**
Manager, Ubisoft China AI & Data Lab

- **[Ivan Poupyrev \(XR Speaker\)](#)**
Director of Engineering, Google

- [Brian Pohl \(Program Speaker\)](#)
Technical Account Manager, Epic Games
 - [David Morin \(Program Speaker\)](#)
Industry Manager for Film & TV, Epic Games
 - [Thierry Frey \(Program Speaker\)](#)
Director of Operations and Technology, Reel FX
-

Glen Keane (Keynote Speaker)

Director and Legendary Academy Award-winning Animator | Creator of The Little Mermaid, Aladdin, The Beast, Tarzan, and Rapunzel



Bio:

A 38-year veteran of Walt Disney Feature Animation, Glen Keane trained under Walt Disney's Nine Old Men. Keane went on to create many beloved Disney characters such as The Little Mermaid, Aladdin, The Beast, Tarzan, and Rapunzel. In 2012, Keane departed Disney to begin Glen Keane Productions as a way to further his artistic explorations in animation, design, and film. He has since gone on to collaborate with Google, the Paris Ballet, and Kobe Bryant. His most recent project is the Academy Award-winning animated film *Dear Basketball*, which he animated and directed in collaboration with legends Kobe Bryant and John

Presentation abstract:

'The Continuous Evolution of Animation: A conversation with the Legendary Animator, Glen Keane'

In this session, you will have a chance to have an in-depth conversation with Academy Award-winning Director and Animator, Glen Keane, who was trained under Walt Disney's Nine Old Men and is most noted for his creation of many beloved Disney characters such as The Little Mermaid, Aladdin, The Beast, Tarzan, and Rapunzel. In addition to his latest directorial debut, *Over the Moon*, he will also walk us through his animation career; how he transitioned from 2D animation, traditional drawings to digital and beyond, leveraging on the continuous advancements in technology to explore and push his creativity.

Click [here](#) for more information.

[Back to list](#)

Paul Franklin (Keynote Speaker)

VFX Supervisor & Creative Director | Double Negative



Bio:

Paul Franklin is one of the world's leading visual effects designers with over 30 years of experience in filmmaking, two Academy Awards and two BAFTAs to his name. Paul started out by making short films with his friends at university whilst studying Fine Art in the 1980s, which is where he first worked with digital imaging systems. After graduation, Paul became one of the first 3D computer animators working in the British video games industry before moving into television where he worked on a wide variety of television commercials and broadcast shows. In the mid 1990s, Paul moved into feature film VFX, creating animated sequences for the films 'Hackers' and 'The Borrowers', and in 1998 he became one of the co-founders of Double Negative, setting up the new company's 3D animation department. Paul supervised visual effects for all three films in Christopher Nolan's Dark Knight Trilogy, earning his first Academy Award nomination for his work on 'The Dark Knight'. Paul then went on to design and supervise the visual effects for Nolan's 'Inception' and 'Interstellar', winning Academy Awards for both films. He has also received five BAFTA nominations for his work, resulting in two wins. Paul serves as DNEG's Creative Director, overseeing a wide range of projects within the company. His work as a visual effects supervisor and designer can also be seen in films such as 'Harry Potter And The Order Of The Phoenix', 'Harry Potter And The Half Blood Prince' and 'Venom'.

Presentation abstract:

To be advised.

[Back to list](#)

Ian Failes (Keynotes' Moderator)

VFX & Animation Journalist | Editor of before & afters



Bio:

Ian Failes is a VFX and animation journalist based in Sydney, and is the editor of before & afters (beforeandafters.com). He has written for VFX Voice, fxguide, Cartoon Brew, 3D Artist, 3D World and several other publications. Ian is also the author of the book, 'Masters of FX'.

Click [here](#) for more information.

[Back to list](#)

Skip Rizzo (Featured Sessions Speaker)

Director of Medical VR, USC Institute for Creative Technologies



Bio:

Albert "Skip" Rizzo is a Clinical and Neuro- Psychologist, and Director of the University of Southern California Institute for Creative Technologies Medical VR Lab. He is also a research professor in both the USC Dept. of Psychiatry and in the School of Gerontology. Skip conducts research on the design, development and evaluation of VR systems targeting the areas of clinical assessment, treatment and rehabilitation. In the psychological domain, he has directed the development/implementation of the Virtual Iraq/Afghanistan VR exposure therapy system for combat-related PTSD and is involved in translating these simulation assets for PTSD assessment and prevention (stress resilience).

Presentation abstract:

'Clinical Virtual Reality: Seven Ways that Virtual Reality Will Change the World of Mental Healthcare!'

Click [here](#) for more information.

[Back to list](#)

Christophe Hery (Featured Sessions Moderator)

Research Scientist, Facebook Reality Labs



Bio:

Christophe Hery joined Facebook Reality Labs in 2019. Previously, he worked at Pixar, where he held the position of Senior Scientist. After writing new lighting models and rendering methods for Monsters University and The Blue Umbrella, Christophe continued heading the light transport research group in the studio. Christophe's latest work includes Finding Dory, Coco and Toy Story 4. An alumnus of Industrial Light & Magic, Christophe previously served as a research and development lead, supporting the facility's shaders and providing rendering guidance. He was first hired by ILM in 1993 as a senior technical director. During his career at ILM, he received two Technical Achievement Awards from the Academy of Motion Pictures Arts and Sciences.

Presentation abstract:

'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here](#) for more information.

[Back to list](#)

Mike Seymour (Featured Sessions Moderator)

Co-founder, fxguide and the Motus Lab USYD



Bio:

Mike Seymour is a researcher at the University of Sydney. Mike did his PhD researching Digital Humans as a new form of Human-Computer Interface. Mike is co-founder of fxguide.com and Director of the Motus Lab. His expertise and research interests cover the areas of Digital Humans, innovative UX and VR/AR research, the impact of emotion, on human computer interaction, and engaged research with Industry partners especially in the Media and Entertainment space. Mike has extensive experience in industry, having worked and lived in the UK and USA before returning to Sydney. He has previously Chaired Real-Time Live @ Siggraph Asia.

Presentation abstract:

'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here](#) for more information.

[Back to list](#)

Ronald Mallet (Featured Sessions Panel)

Director of Research, Facebook Reality Labs



Bio:

Ronald Mallet is director and founder of Facebook Reality Labs in Sausalito, focused on pursuing photorealistic physically based virtual humans for AR/VR applications. His research is focused on machine perception, biomechanical motion analysis, data-driven simulations and rendering of genuine human interactions behaviors, spanning sub-disciplines in computer vision, computer graphics, and machine learning. Prior to joining Oculus Research, he was a lead researcher at Industrial Light & Magic, a Lucasfilm division, working on cutting edge technologies to deliver visual effects and digital characters for high-end feature films, including Avatar, Star Wars, Harry Potter, Pirates of the Caribbean, The Avengers, Transformers and others. He received an Academy Award for Technical Achievement for his groundbreaking work on markerless full body on-set motion capture in 2016. Prior to ILM, he held various research and engineering positions since 1997, including leading the awarding-winning MatchMover software project for camera tracking, focusing mostly on 3d data capture and

reconstruction for visual effects, and digital image, video and signal processing applications.

Presentation abstract:

‘Digital humans are back! Creating and using believable avatars in the age of covid’

[Click here](#) for more information.

[Back to list](#)

Melinda Ozel (Featured Sessions Panel)

Expression Scientist, Owner, Face of the FACS



Bio:

Melinda Ozel is an expression expert and educator. Her agenda is to push the innovation of expressions in art and technology to greater levels of accuracy and higher standards of ethics. She is dedicated to sharing her knowledge and giving people the tools they need to create or track salient expressions. Melinda has applied her studies to a diverse set of industries from marketing and tech to science and art. Melinda is passionate about integrating concepts from cross-disciplinary fields and promoting others to do so as well.

Presentation abstract:

‘Digital humans are back! Creating and using believable avatars in the age of covid’

[Click here](#) for more information.

[Back to list](#)

Mark Sagar (Featured Sessions Panel)

CEO, Soul Machines



Bio:

Double Academy Award winner Dr. Mark Sagar is the Co-Founder and CEO of Soul Machines and director of the Laboratory for Animate Technologies at the Auckland Bioengineering Institute. Mark and his team are bringing technology to life, pioneering the creation of autonomously animated virtual humans with virtual brains and nervous systems, capable of highly expressive face to face interaction and real-time learning and emotional response, to create the next generation of human interaction with artificial intelligence. Mark has a Ph.D. in Engineering from the University of Auckland, and was a post-doctoral fellow at M.I.T. He previously worked as the Special Projects Supervisor at Weta Digital and Sony Pictures Imageworks and developed technology for the digital characters in blockbusters such Avatar, King Kong, and Spiderman 2. His pioneering work in computer-generated faces was recognized with two consecutive Scientific and Engineering Oscars in 2010 and 2011. Mark was elected as a fellow of the Royal Society of New Zealand in 2019.

Presentation abstract:

‘Digital humans are back! Creating and using believable avatars in the age of covid’

[Click here](#) for more information.

[Back to list](#)

Rudy Grossman (Featured Sessions Panel)

Director of Production Technology, Soul Machines



Bio:

Rudy provides global management and supervision of the production teams developing technology to streamline building digital humans as a scalable product, while also evolving the technology to continually improve overall quality of the next generation digital humans. Rudy's technical, creative, and supervisory contributions can be seen in over 40 blockbuster film and television projects, while working at top visual effects studios such as Weta Digital, Digital Domain, Method Studios, and Industrial Light + Magic. These projects include Pirates of the Caribbean, Wonder Woman, Star Wars, Game of Thrones, Deadpool, Maleficent, Hellboy, Xmen, Pacific Rim, and King Kong. Rudy has provided leadership and supervision in over 10 different vfx departments/roles, most recently as a Visual Effects Supervisor, Digital Effects Supervisor, and was a key contributor in the developments behind two Scientific and Engineering Oscar awards in 2011 and 2017.

Presentation abstract:

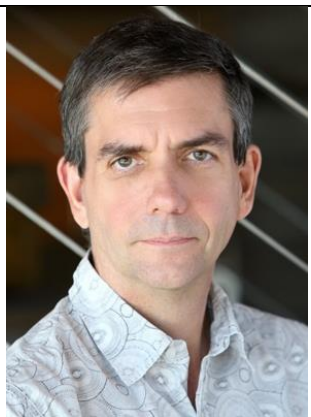
'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here](#) for more information.

[Back to list](#)

Doug Roble (Featured Sessions Panel)

Senior Director, Software R&D



Bio:

As the Senior Director of Software R&D at Digital Domain, Doug leads a world-class team that develops software and conducts research to advance the artistry and technology for feature films and new media of all kinds. Doug has won two Academy Sci-Tech Awards: one for "Track," a groundbreaking computer vision system developed in 1993 and still in use today; and for Digital Domain's fluid simulation system which set the standard for large-scale water effects when it was released in 2001. Doug is an active member of the Visual Effects branch of the Academy and is the chair of the Academy's Sci/Tech Awards Committee.

Presentation abstract:

'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here](#) for more information.

[Back to list](#)

Darren Hendler (Featured Sessions Panel)

Director, Digital Human Group, Digital Domain



Bio:

Darren Hendler is a 20+ year veteran of the visual effects industry, where he has contributed his talents to over 18 feature films and scores of commercials. In his role as the Director of the Digital Human Group, Darren is responsible for spearheading new technology to create photo-real creatures and digital humans for feature films, real-time events and new technology platforms. Most recently Darren completed work on Marvel's Avengers: End Game (2019) & Infinity Wars (2018), where he was responsible for overseeing creature development as well as developing new technology to bring Thanos to life.

Presentation abstract:

'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here for more information.](#)

[Back to list](#)

Hao Li (Featured Sessions Panel)

CEO & Co-founder, Pinscreen, Inc.



Bio:

Hao Li is CEO and Co-Founder of Pinscreen, a startup that builds cutting edge AI-driven virtual avatar technologies. Before that, he was an Associate Professor of Computer Science at the University of Southern California, as well as the director of the Vision and Graphics Lab at the USC Institute for Creative Technologies. Hao's work in Computer Graphics and Computer Vision focuses on digitizing humans and capturing their performances for immersive communication, telepresence in virtual worlds, and entertainment. His research involves the development of novel deep learning, data-driven, and geometry processing algorithms. He is known for his seminal work in avatar creation, facial animation, hair digitization, dynamic shape processing, as well as his recent efforts in preventing the spread of malicious deep fakes. He was previously a visiting professor at Weta Digital, a research lead at Industrial Light & Magic / Lucasfilm, and a postdoctoral fellow at Columbia and Princeton Universities. He was named top 35 innovator under 35 by MIT Technology Review in 2013 and was also awarded the Google Faculty Award, the Okawa Foundation Research Grant, as well as the Andrew and Erna Viterbi Early Career Chair. He won the Office of Naval Research (ONR) Young Investigator Award in 2018 and was named named to the DARPA ISAT Study Group in 2019. In 2020, he won the ACM SIGGRAPH Real-Time Live! "Best in Show" award. Hao obtained his PhD at ETH Zurich and his MSc at the University of Karlsruhe (TH).

Presentation abstract:

'Digital humans are back! Creating and using believable avatars in the age of covid'

[Click here for more information.](#)

[Back to list](#)

Abhishek Arora (Games Program Speaker)

Graphics Programmer, Naughty Dog



Bio:

Abhishek completed his Master's Degree in Interactive Technology from Southern Methodist University Guildhall in 2019. He joined Naughty Dog as a Graphics Programmer shortly after. Born in Bangalore, India and always striving to apply technology towards artistic ends, Abhishek has always wanted to create immersive, engaging experiences for others to enjoy and be a part of. Video games, music and writing is an integral part of his life, and it is his goal to give back to the world while adapting to and contributing toward cutting edge technology that will take us far beyond reality.

Presentation abstract:

When cinematics have to happen in real time, lighters have to face certain challenges. Due to the nature of the medium, the system has limited resources. Lighters need to evaluate the cost of each shot compared to the quality that can be achieved. There are several features that can be adjusted to achieve a good balance. Of these features, this talk will highlight how to optimize for runtime light shadows as well as for hair and skin. Additionally, depth of field plays a prominent role in The Last of Us Part II's real-time cinematics. During the late stages of the project, the lighting team discovered numerous artifacts in many of the game's cinematics, at which point we could afford to make only calculated fixes on the programming side. A deep dive into how these issues were analyzed and resolved will offer insight into the intricacies of this post process effect.

[Click here](#) for more information.

[Back to list](#)

Mari Wang (Games Program Speaker)

Cinematic Lighter, Naughty Dog



Bio:

Mari graduated from the University of Hawaii and the Gnomon School of Visual Arts. She started her career as a lighter on Disney's Wreck It Ralph. After concluding her stint at Disney, Mari joined Naughty Dog as a cinematic lighter for The Last of Us. Apart from The Last of Us, Mari has also done cinematics The Last of Us; Left Behind, Uncharted 4: A Thief's End and Uncharted: The Lost Legacy. Mari is also the lead cinematic lighter for The Last of Us Part II.

Presentation abstract:

When cinematics have to happen in real time, lighters have to face certain challenges. Due to the nature of the medium, the system has limited resources. Lighters need to evaluate the cost of each shot compared to the quality that can be achieved. There are several features that can be adjusted to achieve a good balance. Of these features, this talk will highlight how to optimize for runtime light shadows as well as for hair and skin. Additionally, depth of field plays a prominent role in The Last of Us Part II's real-time cinematics. During the late stages of the project, the lighting team discovered numerous artifacts in many of the game's cinematics, at which point we could afford to make only calculated fixes on the programming side. A deep dive into how these issues were analyzed and resolved will offer insight into the intricacies of this post process effect.

[Click here](#) for more information.

[Back to list](#)

Abassin Sourou Fangbemi (Games Program Speaker)

Data Scientist, Ubisoft China, AI & Data Lab



Bio:

Abassin Sourou Fangbemi is an Associate Data Scientist at Ubisoft China, AI & Data Lab. He obtained his doctorate degree in 2018 at the University of Science and Technology of China in Software Engineering, working on humans' action recognition in videos [1]. He received his master's degree in 2014 and bachelor's degree in 2011 at the same university, respectively in Media Management and Computer Science. He is interested in Machine Learning and Computer Vision, their application in the video games industry, and he is currently focusing his research on 2D and 3D pose estimation of animals from images and videos [2].

[1] Fangbemi, A.S., Liu, B., Yu, N. and Zhang, Y., 2018, August. Binary" proximity patches motion" descriptor for action recognition in videos. In Proceedings of the 10th International Conference on Internet Multimedia Computing and Service (pp. 1-6).

[2] Fangbemi, A.S., Lu, Y.F., Xu, M.Y., Luo, X.W., Rolland, A. and Raissi, C., 2020. ZooBuilder: 2D and 3D Pose Estimation for Quadrupeds Using Synthetic Data. arXiv preprint arXiv:2009.05389.

Presentation abstract:

With the objective of automating the creation of animations for wildlife, this project from Ubisoft China introduces a novel strategy for generating synthetic training data for 2D and 3D pose estimation of animals using keyframe animations. The machine learning models trained with this synthetic data are integrated into an end-to-end pipeline called ZooBuilder, that takes as input a video of an animal in the wild and produces the corresponding 3D animation. With this approach, we produce motion capture-like data from videos that can be used to accelerate the workflow of animators.

Click [here](#) for more information.

[Back to list](#)

Alexis Rolland (Games Program Speaker)

Manager, Ubisoft China AI & Data Lab



Bio:

Alexis Rolland has more than 10 years of experience in Information Technologies and Big Data. He has been working in the video games industry at Ubisoft for the last 9 years, where he most notably developed its Enterprise Data Platform. Since 2018, he has been managing Ubisoft China, AI & Data Lab with a mission of innovation, to accelerate the adoption of Machine Learning into game production pipelines and players experiences.

Presentation abstract:

With the objective of automating the creation of animations for wildlife, this project from Ubisoft China introduces a novel strategy for generating synthetic training data for 2D and 3D pose estimation of animals using keyframe animations. The machine learning models trained with this synthetic data are integrated into an end-to-end pipeline called ZooBuilder, that takes as input a video of an animal in the wild and produces the corresponding 3D animation. With this approach, we produce motion capture-like data from videos that can be used to accelerate the workflow of animators.

Click [here](#) for more information.

[Back to list](#)

Ivan Poupyrev (XR Program Speaker)

Director of Engineering, Google



Bio:

Dr. Ivan Poupyrev is an award--winning scientist, designer and technical leader. Over the last 20 years he has invented, developed and brought to market a number of breakthrough technologies that allow for blending of digital and physical interactivity in everyday objects and devices.

Ivan is currently Director of Engineering in Google's Advanced Technology and Projects (ATAP) group where he leads a team focused on inventing and realizing interaction technologies for our future digital lives. Previously at Walt Disney Imagineering Research Division and Sony Computer Science Labs in Tokyo, his work has been published in leading scientific conferences, received critical acclaim in the press internationally and has been recognized with numerous awards. A published author and frequent public speaker, Fast Company recognized him as one of the World's 100 Most Creative People, describing him as "one of the world's greatest interaction designers." His most recent work was acquired for the permanent collection of the Cooper Hewitt, Smithsonian Design Museum. In 2019, Ivan was honored with the National Design Award for Interaction Design. Established in 2000 by the White House Millennium Council, the National Design Awards recognize design excellence and innovation across the United States.

Presentation abstract:

Ivan Poupyrev will discuss his explorations of the present and the future where technology, connectivity and intelligence are woven into the very fabric of our lives. He will outline his vision of the world as an interface where everything is connected and interactive, viewed through a lens of projects that cover over 20 years of research and that spans and connects a variety of fields from augmented and virtual reality, haptics and touch interfaces, to radars, smart fabrics and interactive living plants. The talk will present his most recent explorations in creating future ambient computing environments: development of a pico-radar for awareness and touchless gesture interaction (Project Soli), and designing a platform for manufacturing interactive, connected soft goods at scale (Project Jacquard).

Click [here](#) for more information.

[Back to list](#)

Brian Pohl (Program Speaker)

Technical Account Manager, Epic Games



Bio:

To be advised.

Presentation abstract:

To be advised.

[Back to list](#)

David Morin (Program Speaker)

Industry Manager for Film & TV, Epic Games



Bio:

David Morin is Epic Games' Industry Manager for Film & TV, where he spearheads efforts from the Unreal Engine team to further its development and adoption across the film and television landscape. He also serves as the Executive Director of the Academy Software Foundation, where he works for the Premier Members to develop the use of open source software in the motion picture industry. Additionally, David is chairman of the Joint Technology Committee on Virtual Production, a past co-chair of the Joint Technology Subcommittee on Previsualization, and a member of the ASC Motion Imaging Technology Council. He earned a B.Sc.A. in computer science from Laval University (Quebec City, Canada) and has participated in the development of motion capture and 3D software since "Jurassic Park" at companies such as Softimage, Microsoft, Avid Technology, Autodesk, and now Epic Games.

Presentation abstract:

David Morin will cover advancements in "in-camera visual effects" and how this technique is changing the film and TV industry. With software developments in real-time game engines, combined with hardware developments in GPUs and on-set video equipment, filmmakers can now capture final pixel visual effects while still on set – enabling new levels of creative collaboration and efficiency during principal photography. These new developments allow changes to digital scenes, even those at final pixel quality, to be seen instantly on high-resolution LED walls – an exponential degree of time savings over a traditional CG rendering workflow. This is crucial as there is a huge demand for more original film and TV content, and studios must find a way to efficiently scale production and post-production while maintaining high quality and creative intent.

[Back to list](#)

Thierry Frey (Program Speaker)

Director of Operations and Technology, Reel FX



Bio:

Thierry Frey has over 25 years of experience in software development in various fields: CAD-CAM, printing and publishing, 3D animation, AR and VR. He is currently Director of Operations and Technology at Reel FX, an animation studio in Montreal. Thierry has been a long-time volunteer in the computer graphics field, an active member of ACM SIGGRAPH and a Board Member of Laval Virtual. Thierry holds a masters degree from Télécom ParisTech and a degree in computer graphics from the Ecole Nationale Supérieure des Arts Décoratifs.

Thierry received the ACM SIGGRAPH Outstanding Service Award in 2020.

Presentation abstract:

To be advised.

[Back to list](#)