thrive
SIGGRAPH2019
LOS ANGELES ● 28 JULY – 1 AUGUST

Plan Your Experience
ADVANCE PROGRAM

TABLE OF CONTENTS

CURATED CONTENT

SIGGRAPH 2019 offers several events and sessions that are individually chosen by program chairs to address specific topics in computer graphics and interactive techniques.

Curated content is not selected through the regular submissions process or comprehensive jury, however it is reviewed by subject matter experts.

ADAPTIVE TECHNOLOGY

Accessibility is an integral part of SIGGRAPH. Every day, virtual, augmented, and mixed reality, as well as other new applications, inform the field with new possibilities that transform and enhance lives. Look for this graphic throughout the Advance Program for content on Adaptive Technology.

INTEREST AREAS

SIGGRAPH brings together a wide variety of professionals who approach computer graphics and interactive techniques from different perspectives.

Our programs and events align with five broad interest areas (*listed below*). Use these interest areas to help guide you through the content at SIGGRAPH 2019.

Production & Animation

Research & Education

Arts & Design

Gaming & Interactive

New Technologies
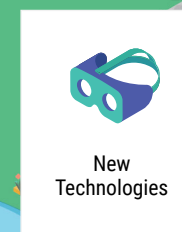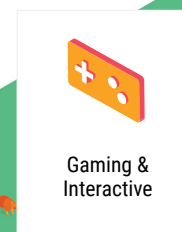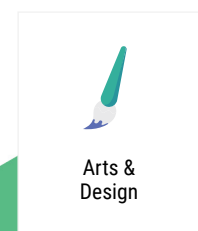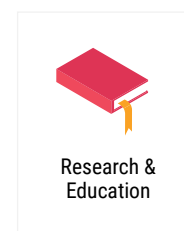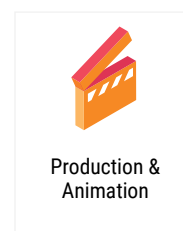
Full Conference One Day registration is available. Includes admission to conference programs and events for the day purchased and the Exhibition (Tuesday-Thursday). It does NOT include Computer Animation Festival - Electronic Theater or Reception.

Event	Saturday 27 July	Sunday 28 July	Monday 29 July	Tuesday 30 July	Wednesday 31 July	Thursday 1 August
REGISTRATION	5:00 PM–7:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–5:35 PM
GEEK BAR		8:30 AM–8:00 PM	8:30 AM–5:35 PM	8:30 AM–7:45 PM	8:30 AM–8:00 PM	8:30 AM–5:35 PM
ATTENDEE LOUNGE		8:30 AM–8:00 PM	8:30 AM–6:00 PM	8:30 AM–7:45 PM	8:30 AM–8:00 PM	8:30 AM–5:35 PM
MERCHANDISE PICKUP CENTER/ SIGGRAPH STORE	5:00 PM–7:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–6:00 PM	8:30 AM–3:30 PM
■ ● ◆ ▲ ⬠ ✦ ⬢ OPENING CEREMONY AND AWARDS PRESENTATIONS			9:00 AM–10:30 AM			
■ ● ◆ ▲ ✦ ⬢ ACM SIGGRAPH AWARD TALKS			3:45 PM–5:15 PM			
■ ● ◆ ▲ ⬠ ✦ ⬢ ACM SIGGRAPH DIVERSITY AND INCLUSION SUMMIT		8:40 AM–5:30 PM				
■ ● ◆ ▲ ⬠ ✦ ⬢ ACM SIGGRAPH FRONTIERS TALKS		8:00 AM–8:45 AM	8:00 AM–8:45 AM	8:00 AM–8:45 AM	8:00 AM–8:45 AM	8:00 AM–8:45 AM
■ ● ◆ ▲ ⬠ ✦ ⬢ ACM SIGGRAPH FRONTIERS WORKSHOPS		9:00 AM–5:00 PM				
■ ● ◆ ▲ ⬠ ✦ ⬢ ACM STUDENT RESEARCH COMPETITION FINAL PRESENTATION					3:45 PM–5:15 PM	
■ ● ◆ ▲ ⬠ ✦ ⬢ APPY HOUR					5:00 PM–7:00 PM	

KEY

REGISTRATION LEVELS

■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S)
▲ Experiences (XP) ⬠ Exhibits (E) ✦ Exhibitors (EX) ⬢ Business Symposium (B)

Event	Saturday 27 July	Sunday 28 July	Monday 29 July	Tuesday 30 July	Wednesday 31 July	Thursday 1 August
■ ● ◆ ▲ ✦ ❋ **ART GALLERY**		1:30 PM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 3:30 PM
■ ● ◆ ▲ **ART PAPERS**				10:45 AM– 12:15 PM AND 3:45 PM– 5:15 PM	10:45 AM– 12:15 PM	
■ ● ◆ ▲ ⬠ ✦ ❋ **BIRDS OF A FEATHER**		ALL WEEK				
❋ **BUSINESS SYMPOSIUM**	2:30 PM– 7:00 PM	9:30 AM– 2:30 PM				
■ ● **COMPUTER ANIMATION FESTIVAL – ELECTRONIC THEATER**			6:30 PM– 8:35 PM			
■ ● ◆ ▲ ⬠ ✦ ❋ ★ **COMPUTER ANIMATION FESTIVAL – VR THEATER KIOSKS**		1:30 PM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 3:30 PM
■ ● **COURSES**		9:00 AM– 5:15 PM	9:00 AM– 5:15 PM	9:00 AM– 5:15 PM	9:00 AM– 5:15 PM	9:00 AM– 5:15 PM
■ ● ◆ ▲ ✦ ❋ **EDUCATORS FORUM**		3:30 PM– 5:00 PM	8:30 AM– 5:15 PM	8:30 AM– 5:15 PM		
■ ● ◆ ▲ ✦ ❋ **EMERGING TECHNOLOGIES**		1:30 PM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 3:30 PM
■ ● ◆ ▲ ⬠ ✦ ❋ **EXHIBITION SHOW FLOOR EXHIBITOR SESSIONS**				9:30 AM– 6:00 PM	9:30 AM– 6:00 PM	9:30 AM– 3:30 PM
■ ● ◆ ▲ ✦ ❋ **EXPERIENCE PRESENTATIONS**		2:00 PM– 5:15 PM	10:45 AM– 12:15 PM AND 3:45 PM– 5:15 PM	9:00 AM– 5:15 PM	9:00 AM– 12:15 PM	9:00 AM– 12:15 PM
■ ● ◆ ▲ ⬠ ✦ ❋ **INTERNATIONAL CENTER**		9:00 AM– 6:00 PM	9:00 AM– 6:00 PM	9:00 AM– 6:00 PM	9:00 AM– 6:00 PM	9:00 AM– 3:30 PM

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SCHEDULE AT A GLANCE

Event	Saturday 27 July	Sunday 28 July	Monday 29 July	Tuesday 30 July	Wednesday 31 July	Thursday 1 August
■ ● ◆ ▲ ⬠ ✦ ☀ **JOB FAIR**				9:30 AM– 6:00 PM	9:30 AM– 6:00 PM	
■ ● ◆ ☀ **KEYNOTE SESSION**			2:00 PM– 3:15 PM			
■ ● **PANELS**		3:45 PM– 5:15 PM	10:45 AM– 12:15 PM AND 3:45 PM– 5:15 PM	9:00 AM– 10:30 AM	9:00 AM– 12:15 PM	2:00 PM– 3:30 PM
PATHFINDERS	4:30 PM– 7:00 PM	8:00 AM– 3:00 PM	8:00 AM– 3:00 PM	8:00 AM– 3:00 PM	8:00 AM– 12:00 PM	
■ ● ◆ ▲ ✦ ☀ **POSTERS**		1:30 PM– 5:30 PM	9:30 AM– 6:00 PM	9:30 AM– 6:00 PM	9:30 AM– 6:00 PM	9:30 AM– 3:30 PM
■ ● ◆ ▲ ✦ ☀ **POSTER SESSIONS**			12:15 PM– 1:15 PM	12:15 PM– 1:15 PM	12:15 PM– 1:15 PM	
■ ● ◆ ▲ ✦ ☀ **PRODUCTION GALLERY**		11:30 AM– 5:30 PM	9:00 AM– 5:30 PM	9:00 AM– 5:30 PM	9:00 AM– 5:30 PM	9:00 AM– 2:00 PM
■ ● ◆ **PRODUCTION SESSIONS**			3:45 PM– 5:15 PM	10:45 AM– 12:15 PM AND 2:00 PM– 5:15 PM	10:45 AM– 12:15 PM AND 2:00 PM– 8:00 PM	10:45 AM– 12:15 PM AND 2:00 PM– 5:15 PM
■ ● ◆ **REAL-TIME LIVE!**				6:00 PM– 7:45 PM		
■ ● **RECEPTION**			8:00 PM– 10:00 PM			
■ ● ◆ ▲ ✦ ☀ **STUDIO**		1:30 PM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 3:30 PM

KEY

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■ Full Conference Platinum (FP)   ★ Full Conference One-Day (FOD)   ● Full Conference (F)   ◆ Select Conference (S)

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Event	Saturday 27 July	Sunday 28 July	Monday 29 July	Tuesday 30 July	Wednesday 31 July	Thursday 1 August
■ ● **TALKS**		9:00 AM– 5:15 PM	3:45 PM– 5:15 PM	9:00 AM– 5:15 PM	9:00 AM– 10:30 AM AND 2:00 PM– 3:30 PM	9:00 AM– 5:15 PM
■ ● **TECHNICAL PAPERS**			10:45 AM– 12:15 PM	9:00 AM– 5:35 PM	9:00 AM– 5:35 PM	9:00 AM– 5:35 PM
■ ● **TECHNICAL PAPERS FAST FORWARD**		6:00 PM– 8:00 PM				
■ ● ◆ ▲ ✦ ☀ **VIRTUAL, AUGMENTED AND MIXED REALITY**		1:30 PM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 5:30 PM	10:00 AM– 3:30 PM
■ ● **VR THEATER SCREENINGS***		1:15 PM** 2:15 PM** 3:15 PM** 4:15 PM**	8:45 AM 9:45 AM 10:45 AM 11:45 AM 1:45 PM 2:45 PM 3:45 PM	8:45 AM 9:45 AM 10:45 AM 11:45 AM 1:45 PM 2:45 PM 3:45 PM	8:45 AM 9:45 AM 10:45 AM 11:45 AM 1:45 PM 2:45 PM 3:45 PM	8:45 AM 9:45 AM 10:45 AM 12:45 PM 1:45 PM

***Computer Animation Festival - VR Theater Ticketing**

VR Theater Screenings are available to Full Conference Platinum and Full Conference attendees only. Tickets will be distributed at the VR Theater Ticket desk in Registration one day before each showing (i.e., Monday tickets are available on Sunday, Tuesday tickets on Monday, etc.).

** On Sunday, 28 July, the VR Theater is for Full Conference Platinum Registrants only.

Note: For all other attendee levels, kiosks will be set up for individual viewings of select VR Theater content throughout the Experience Hall. (Stay tuned for updates on this offering.)

KEY

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WHY ATTEND?

For over 40 years, SIGGRAPH has been the place to gather knowledge and spark collaboration between diverse disciplines—because our vast, robust industry becomes stronger and healthier when leaders converge.

Learn

From visual effects and animation technology to VR and game design, SIGGRAPH 2019 offers courses, talks, and panels that make for a crash course in the latest research and techniques.

Create

Fuel your creativity with cutting-edge tools when you demo the latest in mixed reality or new technologies in the Experience Hall, and then create works of art, whether functional or novel, in the Studio.
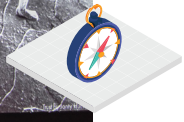
Discover

At the exhibition, explore the latest technology that's changing the workplace for CG and VFX professionals, and throughout the conference see how visionaries are pushing positive change with presentations of adaptive technologies.

Connect

Join artists, researchers, students, and pioneers who come from all over the world to forge bonds between ideas—and each other. SIGGRAPH provides many fun networking opportunities that foster creative relationships between passionate people.

CONFERENCE OVERVIEW

SIGGRAPH 2019 is a five-day immersion into the latest innovations in computer graphics, animation, VR and AR, games, digital art, emerging technologies, and more. Experience research, hands-on demos, and inspiring acts of collaboration alongside fellow creatives, intellects and innovators.

CONFERENCE REGISTRATION CATEGORIES

■ Full Conference Platinum (FP) ▲ Experiences (XP)
● Full Conference (F) ⬟ Exhibits (E)
★ Full Conference One-Day (FOD) ✦ Exhibitors (EX)
◆ Select Conference (S) ✸ Business Symposium (B)

One-Day Registration

Full Conference One-Day registration is available. It includes one-day admission to conference programs, events, and experiences as well as the exhibition (Tuesday-Thursday). It does not include access to the Business Symposium, Electronic Theater or a Reception ticket. For more information, visit www.siggraph.org/about/awards

OPENING CEREMONY AND AWARDS PRESENTATIONS
Monday, 29 July, 9 AM-10:30 AM

■ ● ◆ ▲ ⬟ ✦ ✸

ACM SIGGRAPH 2019 Award Recipients

The Steven Anson Coons Award for Outstanding Creative Contributions to Computer Graphics
Michael F. Cohen
Facebook

The Computer Graphics Achievement Award
Denis Zorin
Courant Institute of Mathematical Sciences, New York University

ACM SIGGRAPH Outstanding Service Award
Jackie White

The Significant New Researcher Award
Wenzel Jakob
École Polytechnique Fédérale de Lausanne (EPFL)

The Distinguished Artist Award for Lifetime Achievement in Digital Art
Donna Cox
University of Illinois

The Outstanding Doctoral Dissertation Award
Lingqi Yan
University of California, Berkeley

Honorable Mentions
Angela Dai
Standford University

Hao Su
Standford University

Adriana Schulz
MIT

ACM SIGGRAPH Practitioner Award
Stephen Hill
Lucasfilm

The Distinguished Educator Award
Andries (Andy) van Dam
Brown University

ACM SIGGRAPH Academy Inductees
Fred Brooks
Marie-Paule Cani
Markus Gross
Dinesh Manocha
Ravi Ramamoorthi
Hanen Samet

ACM SIGGRAPH AWARD TALKS
Monday, 29 July, 3:45 PM-5:15 PM

■ ● ◆ ▲ ✦ ✸

The Awards Talks give award recipients the opportunity to share their research and backgrounds.

ACM SIGGRAPH FRONTIERS

■ ● ◆ ▲ ⬟ ✦ ✸

The ACM SIGGRAPH Frontiers program showcases perspectives on emerging and adjacent areas of interest to the SIGGRAPH community.

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ACM STUDENT RESEARCH COMPETITION FINAL PRESENTATION

■ ● ◆ ▲ ✦ ☀

Student posters are selected for judging at SIGGRAPH 2019. A panel of distinguished judges views the SRC posters during the poster sessions and selects 6-8 of the semi-finalists – one group of undergraduate submissions, and one group of graduate submissions – who present their work to SIGGRAPH 2019 attendees. The competition is sponsored by Microsoft.

APPY HOUR

■ ● ◆ ▲ ✦ ☀

Test drive the latest mobile app creations and share feedback with the independent developers who created them. Got mobile app creations of your own? Don't leave them at home.

ART GALLERY

■ ● ◆ ▲ ✦ ☀

The SIGGRAPH Art Gallery offers a space for creative contemplation. In light of shifting ecological, political, social, and global-relations climates, artists examine the present and consider the question, "What can we do?"

ART PAPERS

■ ● ◆

The SIGGRAPH Art Papers program brings together communities of researchers and practitioners working at the intersections of art, design, humanities, science, and technology.

BIRDS OF A FEATHER (BOF)

■ ● ◆ ▲ ✦ ☀

Shared interests bring SIGGRAPH attendees together for graphics-related, attendee-organized, informational Birds of a Feather sessions.

For an updated list of the Birds of a Feather sessions visit: https://s2019.siggraph.org/conference/programs-events/birds-of-a-feather/

BUSINESS SYMPOSIUM

☀

Join fellow industry professionals and production leaders for networking and exploration of trending and future technologies that will change the way we do business. **The Business Symposium will take place at the L.A. Grand Hotel Downtown on Saturday, 27 July and Sunday, 28 July.**

COMPUTER ANIMATION FESTIVAL ELECTRONIC THEATER (MONDAY, 29 JULY ONLY)

■ ●

The Computer Animation Festival celebrates computer graphics as a medium for storytelling in animation, visual effects, games, and more. Thanks to advances in CG technology, the ways in which we can tell our stories keep expanding, and those stories resonate in ever more impactful ways.

COURSES

■ ●

Broaden your understanding of foundational and cutting-edge techniques in SIGGRAPH Courses. Beginners and experts alike explore the breadth of computer graphics and interactive techniques.

EDUCATOR'S FORUM

■ ● ◆ ▲ ✦ ☀

Those who do, teach. SIGGRAPH 2019's Educator's Forum aims to inspire those who teach, from K-12 through undergraduate and graduate programs, with ideas from industry, research, and academia.

EMERGING TECHNOLOGIES

■ ● ◆ ▲ ✦ ☀

Always first in line? In Emerging Technologies, catch the very latest game-changing tech designed to help us thrive.

EXHIBITION

■ ● ◆ ▲ ⬠ ✦ ☀

At the SIGGRAPH Exhibition, you're invited to check out the newest hardware systems, software tools, and creative services from hundreds of companies. Slip on dazzling VR/AR/MR goggles, get your hands on the stylus of the latest animation tool, and much more.

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EXHIBITOR SESSIONS

■ ● ◆ ▲ ⬠ ✦ ✻

SIGGRAPH 2019 exhibitors demonstrate their software, hardware, and systems, and answer questions about how their applications improve professional and technical performance.

EXPERIENCE PRESENTATIONS

■ ● ◆ ▲ ✦ ✻

Informal presentations on new ideas that are applicable to techniques, concepts, and strategies related to the Experience Hall (Art Gallery, Emerging Technologies, Studio and Immersive Pavilion) programs.

For a complete list, visit https://s2019. siggraph.org/conference/programs-events/ experience-presentations/

INTERNATIONAL RESOURCE CENTER

■ ● ◆ ▲ ⬠ ✦ ✻

The SIGGRAPH International Center exists for our international visitors, offering a place for attendees to meet, collaborate, and learn from one another.

JOB FAIR

■ ● ◆ ▲ ⬠ ✦ ✻

The SIGGRAPH 2019 Job Fair is the best place to forge relationships with recruiters from the industry's top companies. Join us 30-31 July 2019.

KEYNOTE SESSION

Monday, 29 July, 2-3:15 PM

■ ● ◆ ✻

Victoria Alonso
Executive Vice President of Production, Marvel Studios
A bold, creative leader, Alonso has the experience to speak to the evolution of the industry on a variety of levels. In a fireside chat, Alonso will explore what successful storytelling in the digital age looks like, speak to the challenges and importance of encouraging diversity, give advice for successful leadership, and share her insights on the future of interactive technology.

PANELS

■ ●

Lively discussion amongst leading experts in computer graphics and interactive techniques serves up diverse perspectives for consideration and inspiration.

POSTERS

■ ● ◆ ▲ ✦ ✻

Posters is an ideal venue for new researchers to share their theories and innovations with peers and collaborators. Fascinating new content generates discussion, feedback, and inspiration.

POSTER PRESENTATIONS

■ ● ◆ ▲ ✦ ✻

An opportunity for Poster contributors to discuss their work with attendees.

PRODUCTION GALLERY

■ ● ◆ ▲ ✦ ✻

This one-of-a-kind exhibit recognizes the art, processes, and physical materials involved in the creation of major studio projects — not just the final piece on screen. The gallery features artwork, props, costumes, and more from recent film, VR, or game productions.

PRODUCTION SESSIONS

■ ● ◆

Industry leaders demonstrate breakthroughs in visual effects, animation, VR/AR/MR, games, themed entertainment, architecture, scientific visualization, and platforms we haven't yet dreamed of.

REAL-TIME LIVE!

■ ● ◆

Real-Time Live! celebrates the top jury-reviewed interactive novelties of the year. Enjoy the excitement of a live event treating you to a sampling of what's new in real-time.

RECEPTION

Monday, 29 July, 8-10 PM @ L.A. Live

■ ●

The SIGGRAPH 2019 reception will take place at L.A. Live, just a short walk from the Los Angeles Convention Center. Connect with fellow researchers, scientists, artists, and entrepreneurs for an evening of celebration and networking.

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STUDIO

■ ● ◆ ▲ ✦ ☀

The Studio is a place to come and try out all the amazing technology and experiment with the ideas that surround us at SIGGRAPH. Sit down and create something, learn something, and collaborate. Let's play!

TALKS

■ ●

Thought leaders gather at the SIGGRAPH Talks to share ideas and advances on key topics in computer graphics and interactive techniques.

TECHNICAL PAPERS

■ ●

Hear from a wide range of scientists and researchers who drive the industry, inspire new work, and ignite memorable discussions. This is the kind of content you'll reflect on, and refer to, all year.

TECHNICAL PAPERS FAST FORWARD

■ ●

The world's leading experts in computer graphics and interactive techniques preview the Technical Papers in provocative, sometimes hilarious summaries of the field's evolution.

VIRTUAL, AUGMENTED AND MIXED REALITY

■ ● ◆ ▲ ✦ ☀

Immersive technologies are changing the ways we create, play, learn, communicate, and interact. Experience first-hand the latest and greatest advances in VR, AR, and MR at SIGGRAPH.

VR THEATER

■ ●

The VR Theater showcases the best of the best in virtual reality short-form narratives to highlight and celebrate the evolution of a new medium.

APPY HOUR

Discover anything and everything a mobile device can do at Appy Hour. Whether it's augmented reality, high-end mobile gaming, computational photography, image manipulation, location-based gaming, content creation, you'll likely find it here. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/appy-hour/

HOURS

Wednesday, 31 July, 5 PM-7 PM

AIRE - VISUALIZE AIR QUALITY
R&E

Natalia Garcia Torres
Paulina Escalante Campbell
Quimera Verde

ARCALVR: AUGMENTED REALITY PLAYGROUND ON MOBILE DEVICES
R&E

Menghe Zhang
Weichen Liu
Karen Lucknavalai
Kamran Alipour
Jurgen Schulze
University of California, San Diego

NIRA - VIEW, REVIEW, AND PRESENT GBYTES SIZED ASSETS ON ANY DEVICE WITH INTERACTIVE RENDERING ON ANY DEVICE
R&E

Arash Keissami
dRaster, Inc.; Nira.app

Andrew Johnson
Dario Manesku
dRaster, Inc.

PLAYGAMI: AUGMENTED REALITY ORIGAMI CREATIVITY PLATFORM
G&I **NT**

Yosun Chang
AReality3D; Permute.xyz

Uttam Grandhi
PlayGAMI

REALITY: AVATAR BROADCAST YOUR VIRTUAL BEING FROM EVERYWHERE
NT

Akihiko SHIRAI
GREE, Inc.; GREE VR Studio Lab

SUR.FACED.IO
G&I **NT**

Yosun Chang
AReality3D; Permute.xyz

TSUNAMI!
G&I **NT**

Derek Jacoby
Yvonne Coady
Eric Dahl
Andy Wynden
Matt Richardson
University of Victoria

UBEBOT - VOICE-DRIVEN, PERSONALIZED, AVATAR-BASED COMMUNICATIVE VIDEO CONTENT IN A/R
NT

Ari Shapiro
Anton Leuski
Embody Digital

VIVID: DEPICTING DYNAMICS IN STYLIZED LIVE PHOTOS
G&I **NT**

Amir Semmo
Hasso Plattner Institute for Digital Engineering gGmbH

Max Reimann
Mandy Klingbeil
Sebastian Pasewaldt
Digital Masterpieces GmbH

Sumit Shekhar
Matthias Trapp
Jürgen Döllner
Hasso Plattner Institute for Digital Engineering gGmbH

KEYS

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INTEREST AREAS
P&A Production & Animation   **R&E** Research & Education   **A&D** Arts & Design   **G&I** Gaming & Interactive   **NT** New Technologies

XPLORO

G&I NT

Chris Ebeling
Matt Estela
Daniel Flood
Benjamin Skinner
Andrew Bluff
UTS Animal Logic Academy

UTS Animal Logic Academy "Master of Animation and Visualisation" 2018 students: Ailisha Sabalburo, Alexis O'Connor, Benjamin Read, Benjamin Skinner, Calum Anderson, Chana Corna, Chloe Barson, Conor Stack, Fengyuan Xi, Hamish Lawler, Illia Statkevych, Jemima Blackman, Jessica Lubbe, Jorge Arturo Hernandez Ruiz, Luke Avis, Mathilde de Bretteville, Matina Akes, Miriam Bowie-Johnson, Monica Stringer, Muhammad Muzammil, Nicole Goh, Philip Billones, Samantha Chui, Sarah Hoskins, Siraphob Suttidaechanai, Wen Tan and Xuan Jiang

MONDAY NIGHT @ LIVE

Monday, 29 July
Electronic Theater: 6:30 PM-8:35 PM @ Microsoft Theater
Reception: 8 PM-10 PM @ Xbox Plaza at L.A. Live

The Computer Animation Festival Electronic Theater is one night only and one unforgettable experience. Join us at Microsoft Theater as we celebrate computer graphics as a medium for storytelling in animation, visual effects, games, and more. Take a picture with Pixel, enjoy captivating creations, and head over to the Reception afterwards to continue the fun.

KEYS

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INTEREST AREAS
P&A Production & Animation　R&E Research & Education　A&D Arts & Design　G&I Gaming & Interactive　NT New Technologies

The SIGGRAPH 2019 Art Gallery is pleased to announce the return to a juried exhibition, with this year's theme being, "Proliferating Possibilities: Speculative Futures in Art and Design." What solutions might we need to thrive in a future full of promise and unknowns? For content descriptions, visit https://s2019.siggraph. org/conference/programs-events/art-gallery/

ART GALLERY HOURS

Sunday, 28 July, 1:30 PM-5:30 PM
Monday, 29 July, 10 AM-5:30 PM
Tuesday, 30 July, 10 AM-5:30 PM
Wednesday, 31 July, 10 AM-5:30 PM
Thursday, 1 August, 10 AM-3:30 PM

RECEPTION: *LEONARDO*, ART PAPERS, AND ART GALLERY

Tuesday, 30 July, 2 PM-3:30 PM

■ ● ◆ ▲ ✦ ✿

Mix and mingle with artists, researchers, and authors whose works were selected for SIGGRAPH 2019. Meet the *Leonardo* team and members of the SIGGRAPH 2019 committee. Sponsored by *Leonardo*/ISAST and The MIT Press. MIT Press.

EYES

A&D

Yoon Chung Han
San Jose State University

Praful Surve
California State University, Fullerton

FIBER OPTIC OCEAN

A&D

Ozge Samanci
Northwestern University

Adam Snyder
Electronic Arts

Gabriel Caniglia
Northwestern University

LEONARDO

A special issue of *Leonardo, The Journal of the International Society of the Arts, Sciences and Technology* includes visual documentation of the works exhibited in the Art Gallery. Publication of this special issue coincides with SIGGRAPH 2019.

KEYS

REGISTRATION LEVELS
■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S) ▲ Experiences (XP) ● Exhibits (E) ✦ Exhibitors (EX) ✿ Business Symposium (B)

INTEREST AREAS
P&A Production & Animation **R&E** Research & Education **A&D** Arts & Design **G&I** Gaming & Interactive **NT** New Technologies

KNOWING TOGETHER

A&D

Rosalie Yu
Columbia University; The Brown Institute for Media Innovation, Columbia Graduate School of Journalism

Charles Berret
University of British Columbia, School of Journalism

LAVIN

A&D

Jieliang Luo
Media Arts & Technology, University of California, Santa Barbara; Autodesk Research

Weidi Zhang
University of California, Santa Barbara

NOISE AQUARIUM

A&D

Victoria Vesna
University of California, Los Angeles

Martina R. Fröschl
University of Applied Arts Vienna

Glenn Bristol
United Motion Labs

Alfred Vendl
University of Applied Arts Vienna

PACHINKO MACHINE

A&D

Brigitta Zics
UCL Knowledge Lab

ROBOTIC VOICE ACTIVATED WORD KICKING MACHINE

A&D

Neil Mendoza
Neil Mendoza Studio

RUSHI

A&D

John Wong
John Wong Art

TENTACLE FLORA

A&D

Akira Nakayasu
Kobe Design University

TRANSVISION: EXPLORING THE STATES OF THE VISUAL FIELD IN THE AGE OF EXTREME AUGMENTATION

A&D

Jiabao Li
Honghao Deng
Panagiotis Michalatos
Harvard University

WATERTIGHT

A&D

Ziv Schneider
Raycaster, NYU ITP

Caitlin Robinson
Electric South

THE YAWN CHORUS

A&D

Alex Rothera
Humane Engineering, Google

Christopher G. Thompson
Independant

Christopher Baker
School of the Art Institute of Chicago

Shek Po Kwan
Independant

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- ✦ Exhibitors (EX)
- ⬢ Business Symposium (B)

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- **NT** New Technologies

The SIGGRAPH Art Papers program explores innovative and provocative projects in a self-reflective manner: multiple views or entry points, multicultural translation, and multigenerational communication. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/art-papers/

Best Art Paper Award

The Best Art Paper Award recognizes excellence in contributions to the literature on digital arts, computer graphics, and/or interactive techniques. The winner will be announced during the Spaces, Territories, Perception session, Tuesday, 30 July, 10:45 AM-12:15 PM.

RECEPTION: *LEONARDO*, ART PAPERS, AND ART GALLERY

Tuesday, 30 July, 2 PM-3:30 PM

■ ● ◆ ▲ ✦ ✸

Mix and mingle with artists, researchers, and authors whose works were selected for SIGGRAPH 2019. Meet the *Leonardo* team and members of the SIGGRAPH 2019 committee. Sponsored by *Leonardo*/ISAST and The MIT Press. MIT Press.

LEONARDO

In collaboration with Leonardo/ISAST, the Long Art Papers are published in a special issue of *Leonardo, The Journal of the International Society of the Arts, Sciences and Technology*.

The issue also includes visual documentation of the works exhibited in the Art Gallery. Publication of this special issue coincides with SIGGRAPH 2019.

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

TUESDAY, 30 JULY

SPACES, TERRITORIES, PERCEPTION

10:45 AM-12:15 PM

A&D NT

CAVE: Making Collective Virtual Narrative

Kris Layng
Ken Perlin
New York University / Courant, Parallux

Corrine Brenner
New York University

Sebastian Herscher
New York University / Courant, Parallux

Thomas Meduri
New York University / Courant, VRNOVO

Terra Mars: When Earth Shines on Mars Through AI's Imagination

Weili Shi
Bluecadet, LLC

Learning to See. You Are What You See.

Memo Akten
Rebecca Fiebrink
Goldsmiths, University of London

Mick Grierson
University of the Arts, London

Alt'ai — Designing Machine-to-Machine Interfaces for Automated Landscapes

Paul Heinicker
University of Potsdam

Lukáš Likavčan
Masaryk University

Qiao Lin
Daria Stupina
Strelka Institute

Aeolian Traces

Joel Yuzhi Ong
York University

DIGITAL TOOLS, ARCHIVES, MEMORIES

3:45 PM-5:15 PM

A&D

Secrets of Balanced Composition as Seen Through a Painter's Window: Visual Analyses of Paintings Based on Subset Barycenter Patterns

Jin Wan Park
Chung-Ang University

Off-Lining to Tape Is Not Archiving: Why We Need Real Archiving to Support Media Archaeology and Ensure Our Visual Effects Legacy Thrives

Evanthia Samaras
Andrew Johnston
University of Technology Sydney

Artist Residencies for Innovation: Development of a Global Framework

Nicolas Henchoz
Pierre-Xavier Puissant
EPFL+ECAL Lab, STARTS

Ana Solange Leal
Tânia Moreira
INOVA+, STARTS

Hugues Vinet
IRCAM, STARTS

Making Visible the Invisible: A Data-Driven Media Artwork, in Continuous Operation for 14 Years

George Legrady
Media Arts & Technology, UCSB

Rama Karl Hoetzlein
Sentient Artists LLC

Awakened Silence: A Projected Performance

Rachel Dickey
University of North Carolina Charlotte

WEDNESDAY, 31 JULY

3D PRINT, DESIGN, INSTALLATIONS

10:45 AM-12:15 PM

A&D

Weaving Objects: Spatial Design and Functionality of 3D Woven Textiles

Claire Harvey
Emily Holtzman
Rhode Island School of Design, TEAM Inc.

Joy Ko
Brooks Hagan
Rhode Island School of Design

Rundong Wu
Steve Marschner
Cornell University

KEYS

REGISTRATION LEVELS

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INTEREST AREAS

P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

WEDNESDAY, 31 JULY

The Trained Particles Circus: Dealing With Attractors, Automatons, Ghosts, and Their Shadows

Patxi Araujo
University of Basque Country

Knowing Together

Rosalie Yu
Columbia University; The Brown Institute for Media Innovation, Columbia Graduate School of Journalism

Charles Berret
University of British Columbia, School of Journalism

Air Hugs: A Large-Scale Interactive Installation

Rachel Dickey
University of North Carolina Charlotte

No in Disguise: Algorithmically Targeted Conversations About Sexual Consent in a Multimedia Art Installation

Simon Boas
University of California, Santa Cruz

DOWNLOAD THE MOBILE APP

Available via   Available on the App Store   GET IT ON Google Play

Connect with attendees and contributors, plan your week and navigate the conference — all in one place! Download the official SIGGRAPH 2019 mobile app today to get started.

A valid confirmation ID is required to access login-only features. These include: syncing favorites across devices, in-app networking game, submitting session feedback, and posting to the Activity Feed. All other features are available without a login.

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- **A&D** Arts & Design
- **G&I** Gaming & Interactive
- **NT** New Technologies
- Adaptive Tech

The Business Symposium is designed to provide opportunities for interaction and networking, and covers topics of importance to senior managers who want to know how emerging technologies shape and affect business. The symposium will feature keynote speakers and panels on Entertainment Production and Delivery, Cybersecurity, Healthcare Innovation and Diversity and Equity. For session descriptions, visit https://s2019.siggraph.org/conference/programs-events/business-symposium/

HOURS

Saturday, 27 July, 2:30 PM-7 PM
Sunday, 28 July, 9:30 AM-2:30 PM
(Continental Breakfast and lunch buffet included)

The L.A. Grand Hotel Downtown
333 South Figueroa

Session Topics *(Schedule subject to change)*

SATURDAY, 27 JULY

REMARKS AND WELCOME

2:30 PM

OPENING KEYNOTE: THINK LIKE A (F)UTURIST

2:45 PM-3:30 PM

Philip Lelyvedl
USC Entertainment Technology Center, School of Cinematic Arts Entertainment Technology Research

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PANEL: DIGITAL TECHNOLOGIES AND THEIR APPLICATION TO ENTERTAINMENT PRODUCTION AND DELIVERY

3:35 PM-4:40 PM

FIRESIDE CHAT: DIVERSITY AND EQUITY AS BUSINESS IMPERATIVES

4:45 PM-5:30 PM

Lauren McCallum
Mill Film

Sarah Juma
Innovate Inclusion

Natalie Rountree
SIGGRAPH 2019 Adaptive Technology Co-chair

RECEPTION

5:30 PM-7 PM

SUNDAY, 28 JULY

WELCOME AND SUMMARY OF DAY 1

10:00 AM

PANEL: VIRTUAL MEDICINE: INTERACTIVE TECHNOLOGY AND HEALTHCARE DELIVERY

10:15 AM-11 AM

Frances A. Ayalasomayajula
Global Healthcare Solutions, HP

Diane Gromala
Pain Studies Lab, Simon Fraser University

Dirk Reiners
University of Arkansas at Little Rock

Howard Rose
Firsthand Technology

PANEL: CYBERSECURITY – THREATS TO BUSINESS FROM EMERGING TECHNOLOGIES

11:05 AM-11:50 AM

Vlad Gheorghiu
softwareQ Inc.

Veronica (Vern) Wendt
National Defense University

Brian Romansky
Owl Cyber Defense

SUNDAY, 28 JULY

LUNCH

12 PM-1 PM

**CLOSING KEYNOTE: CLASH!
HOW TO MAKE DIVERSITY
YOUR SUPERPOWER**

1:15 PM-2 PM

Alana Conner
Instagram

High-tech projection of the finest achievements in animated feature and short flms, games, advertising, visual effects, real-time effects, real-time graphics, scientific illustration, and scientific visualization. Lineup is subject to change. For content descriptions and an updated list, visit https://s2019.siggraph. org/conference/programs-events/computer-animation-festival/ electronic-theater/

Full Conference Platinum and Full Conference registration levels include an Electronic Theater ticket. All other levels may add a ticket for an additional fee during the registration process.

SCREENINGS - ONE NIGHT ONLY

Monday, 29 July, 6:30 PM-8:35 PM

**Microsoft Theater
777 Chick Hearn Ct
Los Angeles, CA**

Ticket required for entrance.

ALITA: BATTLE ANGEL

Eric Saindon
Weta Digital (New Zealand)

BEST FRIEND

Nicholas Olivieri
GOBELINS, l'école de l'image (France)

"BIRTH OF PLANET EARTH" FULLDOME EXCERPT: PHOTOSYNTHESIS IN A CHROMATOPHORE

Donna Cox
Advanced Visualization Lab, National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign (United States)

THE BOLT CONNECTION

Nicolas Lebas
Supinfocom Rubika (France)

EXPEDITION REEF FOR EDUCATORS

Ryan Wyatt
California Academy of Sciences (United States)

GAME CHANGER

Aviv Mano
Ringling College of Art and Design (United States)

HEDGEHOG

Vaibhav Keswani
GOBELINS, l'école de l'image (France)

ILM 2019 – BEHIND THE MAGIC

Brent Segura-Bowers
Industrial Light & Magic (Canada, Singapore, United States, United Kingdom)

KINKY KITCHEN

Bea Hoeller
Filmakademie Baden-Württemberg GmbH, Animationsinstitut (Germany)

THE MAKING OF "HOW TO TRAIN YOUR DRAGON: THE HIDDEN WORLD"

Dave Walvoord
DreamWorks Animation (United States)

MAROONED

Andrew Erekson
DreamWorks Animation (United States)

MAYDAY – FINAL CHAPTER

Muh Chen
Grass Jelly Studio (Taiwan)

NASA SURVEYS HURRICANE DAMAGE TO PUERTO RICO'S FORESTS

Alex Kekesi
GST, Inc. - NASA/Goddard Space Flight Center (United States)

OLD SOLDIER

Marc Messenger
Blizzard Entertainment (United States)

THE OSTRICH POLITIC

Mohammad Houhou
GOBELINS, l'école de l'image (France)

KEYS

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PASSAGE

Igor Coric
Artrake (Serbia)

PURL

Kristen Lester
Pixar Animation Studios (United States)

SHARE YOUR GIFTS

Buck
Buck & TBWA\Media Arts Lab (United States)

SPIDER-MAN: INTO THE SPIDER-VERSE

Danny Dimian
Sony Pictures Imageworks (United States)

THE HERETIC (PART 1)

Veselin Efremov
Unity Technologies (Denmark)

THE STAINED CLUB

Mélanie Lopez
Supinfocom Rubika (France)

STUFFED

Élise Simoulin
Supinfocom Rubika (France)

THE TREE

Basil Malek-Abudamdan
GOBELINS, l'école de l'image (France)

WILD LOVE

Maryka Laudet
MegaComputeur, Ecole des Nouvelles Images (France)

LET'S CELEBRATE: RECEPTION

Monday, 29 July, 8-10 pm @ Xbox Plaza at L.A. Live

The SIGGRAPH 2019 reception will take place at L.A. Live, just a short walk from the Los Angeles Convention Center. Connect with fellow researchers, scientists, artists, and entrepreneurs for an evening of celebration and networking.

Ticket required for entrance.

SIGGRAPH 2019 Courses offer SIGGRAPH attendees the chance to develop their understanding of CG and interactive techniques. For experts wishing to give back and share their knowledge, Courses are a unique opportunity to present material to an engaged and responsive audience.

Seating is on a first-come, first-served basis. Please arrive early for the course you wish to attend. Visit the Courses page to see the full descriptions: https://s2019.siggraph.org/conference/programs-events/courses/

SUNDAY, 28 JULY

OPENVDB

9 AM-10:30 AM

R&E P&A

Level: Intermediate

Moderator
Ken Museth
Weta Digital

Lecturers
Nick Avramoussis
DNEG

Dan Bailey
ILM Vancouver

ARE WE DONE WITH RAY TRACING?

9 AM-12:15 PM

NT R&E

Level: Advanced

Moderator
Alexander Keller
NVIDIA

Lecturers
Timo Viitanen
NVIDIA

Colin Barré-Brisebois
Electronic Arts

Christoph Schied
Facebook Reality Labs

Morgan McGuire
NVIDIA

COMPUTATIONAL FABRICATION

9 AM-12:15 PM

R&E

Level: Intermediate

Lecturers
Wojciech Matusik
MIT

Adriana Schulz
University of Washington

DEEP LEARNING: A CRASH COURSE

9 AM-12:15 PM

NT G&I P&A

Level: Begineer

Lecturer
Andrew Glassner
The Imaginary Institute

PERCEPTION OF VIRTUAL CHARACTERS

2 PM-3:30 PM

NT G&I P&A

Level: Begineer

Moderator
Rachel McDonnell
Trinity College Dublin

Lecturers
Eduard Zell
Katja Zibrek
Trinity College Dublin

KEYS

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SUNDAY, 28 JULY

A DEEP DIVE INTO UNIVERSAL SCENE DESCRIPTION AND HYDRA

2 PM-5:15 PM

`R&E` `P&A`

Level: Intermediate

Moderator
George ElKoura
Sebastian Grassia
Pixar Animation Studios

Lecturers
Sunya Boonyatera
Pol Jeremias-Vila
Matt Kuruc
Alex Mohr
Pixar Animation Studios

INTRODUCTION TO REAL-TIME RAY TRACING

2 PM-5:15 PM

`P&A` `G&I`

Level: Beginner

Lecturers
Peter Shirley
Chris Wyman
NVIDIA

Morgan McGuire
NVIDIA, University of Waterloo

PATH GUIDING IN PRODUCTION

2 PM-5:15 PM

`P&A`

Level: Intermediate

Moderator
Jiří Vorba
Johannes Hanika
Weta Digital

Lecturers
Sebastian Herholz
University of Tübingen

Jaroslav Křivánek
Charles University, Prague; Render Legion

Alexander Keller
Thomas Müller
NVIDIA Research

MONDAY, 29 JULY

CREATIVEAI: DEEP LEARNING FOR GRAPHICS

9 AM-12:15 PM

`G&I`

Level: Beginner

Moderator
Niloy J. Mitra
University College London

Lecturers
Iasonas Kokkinos
Paul Guerrero
University College London

Nils Thuerey
TU Munich

Vladimir Kim
Adobe Research

Leonidas Guibas
Stanford University

⊕ ADVANCES IN REAL-TIME RENDERING IN GAMES: PART 1

9 AM-12:15 PM

`G&I`

Level: Intermediate

Lecturer
Natalya Tatarchuk
Unity Technologies

⊕ ADVANCES IN REAL-TIME RENDERING IN GAMES: PART 2

2 PM-5:15 PM

`G&I`

Level: Intermediate

Natalya Tatarchuk
Unity Technologies

LIGHTING DESIGN FOR STYLIZED ANIMATION

3:45 PM-5:15 PM

`P&A`

Level: Beginner

Lecturer
Dave Walvoord
DreamWorks Animation

TUESDAY, 30 JULY

PRACTICAL COURSE ON COMPUTING DERIVATIVES IN CODE

9 AM-10:30 AM

`R&E`

Level: Intermediate

Lecturer
Craig Schroeder
University of California Riverside
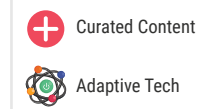
TUESDAY, 30 JULY

GEOMETRIC COMPUTING WITH PYTHON

2 PM-3:30 PM

`R&E`

Level: Beginner

Lecturers
Sebastian Koch
TU Berlin

Teseo Schneider
Francis Williams
Daniele Panozzo
New York University, NYU Courant Institute

CINEMATIC SCIENTIFIC VISUALIZATION: THE ART OF COMMUNICATING SCIENCE

2 PM-5:15 PM

`R&E` `A&D`

Level: Beginner

Moderators
Kalina Borkiewicz
AJ Christensen
National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign

Lecturers
Ryan Wyatt
California Academy of Sciences, Morrison Planetarium

Greg Shirah
NASA, Scientific Visualization Studio

Helen-Nicole Kostis
USRA/GESTAR, NASA/SVS

OPEN PROBLEMS IN REAL-TIME RENDERING

2 PM-5:15 PM

`G&I`

Level: Intermediate

Lecturers
Natalya Tatarchuk
Unity Technologies

Aaron Lefohn
NVIDIA

WEDNESDAY, 31 JULY

COLOR FUNDAMENTALS FOR DIGITAL CONTENT CREATION, VISUALIZATION AND EXPLORATION

9 AM-10:30 AM

`A&D`

Level: Beginner

Lecturer
Theresa-Marie Rhyne
Consultant

PATH TRACING IN PRODUCTION PART 1

9 AM-12:15 PM

`P&A`

Level: Intermediate

Moderators
Luca Fascione
Weta Digital

Johannes Hanika
Weta Digital, Karlsruhe Institute of Technology

Lecturers
Marc Droske
Jorge Schwarzhaupt
Weta Digital

Daniel Heckenberg
Animal Logic

Christopher Kulla
Sony Pictures Imageworks

GEOMETRIC ALGEBRA FOR COMPUTER GRAPHICS

2 PM-3:30 PM

`R&E`

Level: Intermediate

Lecturers
Charles Gunn
Raum+Gegenraum

Steven De Keninck
Angle Gaming Labs

KEYS

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WEDNESDAY, 31 JULY

AN INTRODUCTION TO PHYSICS-BASED ANIMATIONS

2 PM-5:15 PM

`P&A` `G&I`

Level: Beginner

Lecturers
Adam Bargteil
University of Maryland, Baltimore County

Tamar Shinar
University of California, Riverside

PATHTRACING IN PRODUCTION PART 2

2 PM-5:15 PM

`P&A`

Level: Intermediate

Moderators
Luca Fascione
Weta Digital

Johannes Hanika
Weta Digital, Karlsruhe Institute of Technology

Lecturers
Wenzel Jakob
EPFL

Andrea Weidlich
Weta Digital

Rob Pieké
MPC

Hanzhi Tang
Digital Domain

Andrew Beddini
Blue Sky Studios

THURSDAY, 1 AUGUST

MY FAVORITE SAMPLES

9 AM-12:15 PM

`R&E`

Level: Advanced

Moderator
Alexander Keller
NVIDIA

Lecturers
Iliyan Georgiev
Autodesk

Abdalla Ahmed
King Abdulla University of Science and Technology
Per Christensen
Pixar Animation Studios

Matt Pharr
NVIDIA

DIFFERENTIABLE GRAPHICS WITH TENSORFLOW 2.0

9 AM-12:15 PM

`NT`

Level: Intermediate

Moderator
Sofien Bouaziz
Martin Wicke
Google

Lecturers
Julien Valentin
Paige Bailey
Josh Gordon
Christian Haene
Alexander Mordvintsev
Shan Carter
Google

CAPTURE4VR: FROM VR PHOTOGRAPHY TO VR VIDEO

2 PM-5:15 PM

`NT`

Level: Intermediate

Moderator
Christian Richardt
University of Bath

Lecturers
Peter Hedman
University College London

Ryan S. Overbeck
Google LLC

Brian Cabral
Facebook

Robert Konrad
Stanford University

Steve Sullivan
Microsoft

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THURSDAY, 1 AUGUST

ON HYBRID LAGRANGIAN-EULERIAN SIMULATION METHODS: PRACTICAL NOTES AND HIGH-PERFORMANCE ASPECTS

3:45 PM-5:15 PM

R&E

Level: Intermediate

Moderator
Chenfanfu Jiang
University of Pennsylvania

Lecturers
Yuanming Hu
MIT CSAIL

Xinxin Zhang
Beijing Film Academy

Ming Gao
Chenfanfu Jiang
University of Pennsylvania

RTX ACCELERATED RAY TRACING WITH OPTIX

3:45 PM-5:15 PM

P&A

Level: Intermediate

Lecturers
Ingo Wald
Steven G. Parker
NVIDIA

KEYS

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The Educator's Forum is devoted entirely to content for educators, allowing you to optimize your conference experience and recharge for the upcoming school year. It will showcase material in the form of panels, talks, courses, and Groovy Graphics Assignments. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/educators-forum/

SUNDAY, 28 JULY

EDUCATOR'S FORUM MEET & GREET RECEPTION

3:30 PM-5 PM

MONDAY, 29 JULY

EDUCATOR'S FORUM EDUCATION COMMITTEE WELCOME

8:30 AM-9 AM

EDUCATOR'S FORUM PANEL: PREPARING STUDENTS TO TAKE THE NEXT STEP: SCHOOL TO WORK TRANSITION (DEMO REELS AND BEYOND)

9 AM-10:30 AM

R&E

Moderator
Glenn Goldman
New Jersey Institute of Technology

Panelists
Jimmy Ockey
Animal Logic

Javier Romerollion
Animation Studios

Sylvie Tehbelian
MPC Film/The Focus

Elizabeth Zavitsanos
Activision

EDUCATOR'S FORUM GROOVY GRAPHIC ASSIGNMENTS

10:45 AM-12:15 PM

R&E

Image Glitching: Manipulating Images with Audio Effects

Erik Brunvand
University of Utah

Groovy Assignment: The VR Ride

Nick Jushchyshyn
Robert Lloyd
Erik Sundquist
Drexel University

Creating a Modern Classic Visual Effect

Ken Cameron
University of Bath

EDUCATOR'S FORUM COURSE: PROCEDURAL ORGANIC MODELING

3:45 PM-5:15 PM

R&E

David Bachman
Pitzer College

KEYS

REGISTRATION LEVELS
■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S)
▲ Experiences (XP) ● Exhibits (E) ✦ Exhibitors (EX) ● Business Symposium (B)

INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies   + Curated Content

TUESDAY, 30 JULY

EDUCATOR'S FORUM EDUCATION COMMITTEE WELCOME

8:30 AM-9 AM

EDUCATOR'S FORUM PANEL: APPROACHES FOR IMMERSIVE MEDIA CURRICULUM IMPLEMENTATION

9 AM-10:30 AM

R&E

Moderator
Nick Jushchyshyn
Drexel University

Panelists
Timothy McLaughlin
Texas A&M University

Morgan Woolverton
Ringling College of Art + Design

➕ EDUCATOR'S FORUM TALKS: SIGCSE REPRISE

10:45 AM-12:15 PM

R&E

Achieving Gender Balance through Creative Expression

William Bares
Bill Manaris
Renee McCauley
Christine Moore
College of Charleston

Stitching the Loop with Electronic Textiles

Deborah Fields
Utah State University

Yasmin Kafai
Debora A. Lui
Justice Walker
Mia S. Shaw
Gayithri Jayathirtha
University of Pennsylvania

Tomoko M. Nakajima
University of California, Los Angeles

Joanna Goode
University of Oregon

Michael T. Giang
California State Polytechnic University, Pomona

One Size Fits All: Designing for Socialization in Physical Computing

Gabriella Anton
Uri Wilensky
Northwestern University

Trial by Flyer: Building Quadcopters From Scratch in a Ten-Week Capstone Course

Steven Swanson
University of California, San Diego

EDUCATOR'S FORUM COURSE: A (MOSTLY) PLATFORM-AGNOSTIC APPROACH TO MODERN GPU APIs

2 PM-3:30 PM

R&E

Dave Shreiner
Unity Technologies

EDUCATOR'S FORUM BIRDS OF A FEATHER: VR AND EDUCATION

3:45 PM-5:15 PM

NT **R&E**

Barbara Mones
University of Washington

KEYS

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A mid-point between inception and adoption, the Emerging Technologies program offers a preview of what's to come. More specifically, this year's attendees will witness the ways technology is making the world better. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/emerging-technologies/

Emerging Technologies interest areas: NT R&E

360-DEGREE TRANSPARENT HOLOGRAPHIC SCREEN DISPLAY

Tomoharu Nakamura
Tomoya Yano
Kohki Watanabe
Yui Ishii
Hideki Ono
Ippei Tambata
Nobuki Furue
Yuji Nakahata
Sony Corporation

A COMPACT RETINAL SCAN NEAR-EYE DISPLAY

Katsuyuki Akutsu
Susumu Seino
Yusuke Ogawa
Kenji Ohki
Atsushi Takahashi
Daisuke Ueda
Ryo Ogawa
Teppei Imamura
Akira Yoshikaie
Sony Corporation

A DESIGN FOR OPTICAL CLOAKING DISPLAY

Takahito Aoto
University of Tsukuba

Yuta Itoh
Kazuki Otao
Kazuki Takazawa
Yoichi Ochiai
University of Tsukuba; Pixie Dust Technologies, Inc.

A STRETCH-SENSING SOFT GLOVE FOR INTERACTIVE HAND POSE ESTIMATION

Oliver Glauser
Shihao Wu
ETH Zurich

Daniele Panozzo
New York University

Otmar Hilliges
Olga Sorkine-Hornung
ETH Zurich

A TRANSPARENT DISPLAY WITH PER-PIXEL COLOR AND OPACITY CONTROL

TJ Rhodes
Gavin Miller
Li-Yi Wei
Qi Sun
Daichi Ito
Adobe Research

ACTIVE TEXTILE TAILORING

Skylar Tibbits
Jared Laucks
Schendy Kernizan
Bjorn Sparrman
Lavender Tessmer
Carmel Snow
MIT, Self-Assembly Lab

Gihan Armarasiriwardena
Ministry of Supply

AFFECTIVEHMD: FACIAL EXPRESSION RECOGNITION IN HEAD MOUNTED DISPLAY USING EMBEDDED PHOTO REFLECTIVE SENSORS

Masaaki Murakami
Kosuke Kikui
Katsuhiro Suzuki
Fumihiko Nakamura
Masaaki Fukuoka
Katsutoshi Masai
Yuta Sugiura
Maki Sugimoto
Keio University

ARQUE: ARTIFICIAL BIOMIMICRY-INSPIRED TAIL FOR EXTENDING INNATE BODY FUNCTIONS

Junichi Nabeshima
MHD Yamen Saraiji
Keio University Graduate School of Media Design

Kouta Minamizawa
Keio University Graduate School of Media Design, Japan Science and Technology Agency

CHICMR: IMMERSIVE MIXED REALITY SYSTEM USING VIDEO-SEE-THRU HMD AND 3D LIDAR SCANNER

Jin Ha Hwang
Center of Human-Centered Interaction for Coexistence

Hyukmin Kwon
Korea Institute of Science and Technology

Younguk Kim
Yong-Ho Lee
Jinbaek Kim
JungKyu Kim
Bum-Jae You
Center of Human-Centered Interaction for Coexistence

DEMONSTRATING PREEMPTIVE ACTION: ACCELERATING HUMAN REACTION USING ELECTRICAL MUSCLE STIMULATION WITHOUT COMPROMISING AGENCY

Jun Nishida
University of Chicago, SonyCSL

Shunichi Kasahara
SonyCSL, University of Tokyo

Pedro Lopes
University of Chicago, Hasso-Plattner Institute

EIGEN ZOETROPE

Gou Koutaki
Kumamoto University

EYEHACKER: GAZE-BASED AUTOMATIC REALITY MANIPULATION

Daichi Ito
Graduate School of Information Science and Technology, The University of Tokyo

Sohei Wakisaka
Atsushi Izumihara
Research Center for Advanced Science and Technology, The University of Tokyo

Tomoya Yamaguchi
National Institute of Technology, Ishikawa College

Atsushi Hiyama
Masahiko Inami
Research Center for Advanced Science and Technology, The University of Tokyo

GLIDEREALITY: A HIGHLY IMMERSIVE VR SYSTEM AUGMENTED BY A NOVEL MULTI-MODAL AND MULTI-CONTACT CUTANEOUS WEARABLE DISPLAY

Miguel Altamirano Cabrera
Jonathan Andres Tirado Rosero
Dzmitry Tsetserukou
Skolkovo Institute of Science and Technology

GOLF TRAINING SYSTEM USING SONIFICATION AND VIRTUAL SHADOW

Atsuki Ikeda
Yuka Tanaka
Dong-Hyun Hwang
Homare Kon
Hideki Koike
Tokyo Institute of Technology

HAPTIC PLASTER: SOFT, THIN, LIGHT AND FLEXIBLE HAPTIC DISPLAY USING DEA COMPOSED OF SLIDE-RING MATERIAL FOR DAILY LIFE

Tadatoshi Kurogi
Keio University Graduate School of Media Design; TOYODA GOSEI Co., Ltd.

Yuji Yonehara
TOYODA GOSEI Co., Ltd.

Roshan Lalintha Peiris
Keio University Graduate School of Media Design

Takeshi Fujiwara
TOYODA GOSEI Co., Ltd.

Kouta Minamizawa
Keio University Graduate School of Media Design, Japan Science and Technology Agency

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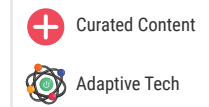
LIQUID PRINTED PNEUMATICS

Bjorn Sparrman
Schendy Kernizan
Jared Laucks
Skylar Tibbits
MIT Self-Assembly Lab

Christopher Guberan
Product Designer

MAGNIFINGER: MAGNIFIED PERCEPTION BY A FINGERTIP PROBE MICROSCOPE

Noriyasu Obushi
Sohei Wakisaka
The University of Tokyo

Shunichi Kasahara
The University of Tokyo; Sony Computer Science Laboratories, Inc.

Atsushi Hiyama
The University of Tokyo, RIKEN Center for Advanced Intelligence Project

Masahiko Inami
The University of Tokyo

MATCHING VISUAL ACUITY & PRESCRIPTION: TOWARDS AR FOR HUMANS

Jonghyun Kim
Michael Stengel
NVIDIA

Jui-Yi Wu
NVIDIA, National Chiao Tung University

Ben Boudaoud
Josef Spjut
Kaan Akşit
NVIDIA

Morgan McGuire
NVIDIA, University of Waterloo

David Luebke
Rachel Albert
Trey Greer
NVIDIA

Youngmo Jeong
NVIDIA, Seoul National University

Ward Lopes
Zander Majercik
Peter Shirley
NVIDIA

MELODY SLOT MACHINE

Masatoshi Hamanaka
RIKEN

Takayuki Nakatsuka
Waseda University, RIKEN

Shigeo Morishima
Waseda Research Institute for Science and Engineering

PICKHITS: HITTING EXPERIENCE GENERATION WITH THROWING MOTION VIA A HANDHELD MECHANICAL DEVICE

Azumi Maekawa
Seito Matsubara
Atsushi Hiyama
Masahiko Inami
The University of Tokyo

PINOCCHIOVR

Makoto Uju
Kenichiro Shirota
Roshan Peiris
Kouta Minamizawa
Keio University Graduate School of Media Design

SHADING ATLAS STREAMING

Joerg H. Mueller
Thomas Neff
Philip Voglreiter
Graz University of Technology

Mina Makar
Qualcomm Technologies Inc.

Markus Steinberger
Graz University of Technology

Dieter Schmalstieg
Graz University of Technology, Qualcomm Technologies Inc.

Elena Ivanchenko
Michael Kenzel
Graz University of Technology

KEYS

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INTEREST AREAS

P&A Production & Animation　R&E Research & Education　A&D Arts & Design　G&I Gaming & Interactive　NT New Technologies

➕ Curated Content
Adaptive Tech

SHAPESENSE: A 2D SHAPE RENDERING VR DEVICE WITH MOVING SURFACES THAT CONTROLS MASS PROPERTIES AND AIR RESISTANCE

Yuhu Liu
Takeru Hashimoto
The University of Tokyo

Shigeo Yoshida
Takuji Narumi
The University of Tokyo; JST, PRESTO

Tomohiro Tanikawa
Michitaka Hirose
The University of Tokyo

SPACE WALK: A COMBINATION OF SUBTLE REDIRECTED WALKING TECHNIQUES INTEGRATED WITH GAMEPLAY AND NARRATION

Eike Langbehn
Frank Steinicke
University of Hamburg

TEEVR: SPATIAL TEMPLATE-BASED ACQUISITION, MODELING, AND RENDERING OF LARGE-SCALE INDOOR SPACES

Nakju Doh
Korea University; TeeLabs Co., Ltd.

Hyunga Choi
Korea University

Bumchul Jang
Sangmin Ahn
Korea University; TeeLabs Co., Ltd.

Hyojin Jung
Sungkyunkwan University; TeeLabs Co., Ltd.

Sungkil Lee
Sungkyunkwan University

TELESIGHT: ENABLING ASYMMETRIC COLLABORATION IN VR BETWEEN HMD USER AND NON-HMD USERS

Taichi Furukawa
Daisuke Yamamoto
Moe Sugawa
Roshan Peiris
Kouta Minamisawa
Keio University Graduate School of Media Design

TRANSFANTOME: TRANSFORMATION INTO BODIES OF VARIOUS SCALE AND STRUCTURE IN MULTIPLE SPACES

Atsushi Izumihara
Tomoya Sasaki
Masahiro Ogino
The University of Tokyo

Reona Takamura
Kobelco Construction Machinery Co., Ltd.

Masahiko Inami
The University of Tokyo

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INTEREST AREAS

P&A Production & Animation R&E Research & Education A&D Arts & Design G&I Gaming & Interactive NT New Technologies

➕ Curated Content
⚛ Adaptive Tech
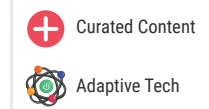
Panels provide a unique attendee experience with a moderator conducting a discussion with three or four expert panelists with varied viewpoints and experience. Interest and novel ideas arise through discussion, agreement, controversy and audience interaction. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/panels/

Seating is on a first-come, first-served basis. Please arrive early for the panel you wish to attend.

SUNDAY, 28 JULY

PREDICTIVE AND PROACTIVE PIPELINES: APPROACHES TO MONITORING AND OPTIMIZING CG FILM PRODUCTION

3:45 PM-5:15 PM

P&A

Moderator
Claudi Chung Sanii
Walt Disney Animation Studios

Panelists
Sean Palmer
Walt Disney Animation Studios

Kaori Ogino
Industrial Light and Magic

Aidan Sarsfield
Animal Logic

Munira Tayabji
DreamWorks Animation

Mark Hill
Framestore

Renee Tam
Pixar Animation Studios

Nick Epstein
Weta Digital

MONDAY, 29 JULY

THE ETHICAL AND PRIVACY IMPLICATIONS OF MIXED REALITY

10:45 AM-12:15 PM

NT

Moderator
Kent Bye
Voices of VR Podcast

Panelists
Diane Hosfelt
Mozilla

Matt Miesnieks
6D.AI

Samantha Mathews Chase
Venn.Agency

Taylor Beck
Magic Leap

BRANDING & MARKETING: STRATEGIES FOR GLOBAL TALENT ACQUISITION IN TODAY'S DIGITAL MEDIA PRODUCTION MARKET

3:45 PM-5:15 PM

P&A

Moderator
Stan Szymanski
StanleyVision, Technicolor Production Services

Panelists
Kerry Shea
MPC Film

Kim Mackey
Skydance Media

Dorothy Montgomery
City National Bank

Brian Hemsworth
Newman Grace Inc., Pepperdine University

KEYS

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

TUESDAY, 30 JULY

FACS AT 40

9 AM-10:30 AM

G&I NT R&E

Moderator
Mike Seymour
University of Sydney, fxguide

Panelists
Erika Rosenberg
Stanford University, Erika Rosenberg Consulting

Vladimir Mastilovic
3Lateral

Mark Sagar
Soul Machines

John Peter Lewis
Google AI

WEDNESDAY, 31 JULY

UNTOLD HERSTORIES: AN HOMAGE TO SIGGRAPH

9 AM-10:30 AM

R&E NT

Moderator
Donna Cox
National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign

Panelists
Ellen Sandor
Janine Fron
(art)n Laboratory

Carolina Cruz-Neira
University of Arkansas at Little Rock

Maxine Brown
University of Illinois at Chicago

Copper Giloth
University of Massachusetts Amherst

Joan Truckenbrod
School of Art Institute of Chicago

Barbara Sykes
Independent Artist

Dana Plepys
University of Illinois at Chicago

Margaret Dolinsky
Indiana University Bloomington

Claudia Hart
School of Art Institute of Chicago

Tiffany Holmes
Maryland Institute, College of Art

VR/AR/MR FOR EVERYONE!

10:45 AM-12:15 PM

NT

Moderator
Jordyn MJ Curley
Czarnowski

Panelists
John Canning
Digital Domain

Elvis Au
Blue Sky Studios

Stephen Phillips
Theia Interactive

Michael McCarthy

Samuel Conlogue
Infusion Studios, Czarnowski

THURSDAY, 1 AUGUST

**FUTURE OF SHARED EXPERIENCES:
XR IS A LONELY WORLD**

2 PM-3:30 PM

G&I NT

Moderator
Aaron Sisto
VentureX

Panelists
Anand Agarawala
Spatial

Varun Mani
PTC

Mark Mine
Disney Imagineering

Jameson Detweiler
Fantasmo

Ben Grossman
Magnopus

Victor Luo
NASA Jet Propulsion Laboratory

Production Sessions bring the production community together to learn from the brightest minds in graphics. These sessions leave attendees feeling inspired, energized, and ready to push new boundaries. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/computer-animation-festival/production-sessions/

Interest Areas: **P&A** ➕

MONDAY, 29 JULY

THE MAKING OF MARVEL STUDIOS' "AVENGERS: ENDGAME"

3:45 PM-5:15 PM

P&A

Panelists
Victoria Alonso (Executive Producer)
Dan DeLeeuw (VFX Supervisor)
Jen Underdahl (VFX Producer)
Marvel Studios

Kelly Port (VFX Supervisor)
Digital Domain

Russell Earl (VFX Supervisor)
Industrial Light & Magic

Matt Aitken (VFX Supervisor)
Weta Digital

Gerardo Ramirez (Visualization Supervisor)
The Third Floor

TUESDAY, 30 JULY

DISNEY PRESENTS: THE MAKING OF THE LION KING

10:45 AM-12:15 PM

P&A

Panelists
Rob Legato (Production VFX Supervisor)
Caleb Deschanel (Director of Photography, ASC)
Walt Disney

STEP RIGHT UP, EVERYONE'S A WINNER – THE MAKING OF "TOY STORY 4"

2 PM-3:30 PM

P&A

Panelists
Bob Moyer (Supervising Technical Director)
Bill Reeves (Technology & Pipeline Supervisor)
Derek Williams (Layout Lead)
Thomas Jordan (Sets Supervisor)
Steve Karski (Sets Supervisor)
Mariana Galindo (Tailoring Lead)
Amy Jones (Lighting Lead)
Ariela Fedorov (Rendering Supervisor)
Pixar Animation Studios

"HOW TO TRAIN YOUR DRAGON": THE HIDDEN WHAT?

3:45 PM-5:15 PM

P&A

Panelists
Dave Walvoord (Visual Effects Supervisor)
Lawrence Lee (Head of FX)
Munira Tayabji (Visual Effects Supervisor)
Paolo deGuzman (Head of Surfacing)
Pablo Valle (Head of Lighting)
Chris De St. Jeor (Character FX Lead)
DreamWorks Animation

WEDNESDAY, 31 JULY

CREATING THE IMMERSIVE WORLD OF BIOWARE'S ANTHEM

10:45 AM-12:15 PM

P&A

Panelists
Gracie Arenas Strittmatter (Technical Art Director)
Jeff Vanelle (Senior Technical Artist I)
Ben Cloward (Senior Technical Artist II)
Eve Colvin (Senior Technical Artist I)
Darrin Stewart (Senior Software Engineer)
BioWare; Electronic Arts

WEDNESDAY, 31 JULY

"SPACE EXPLORERS: LIFE IN ORBIT" – FILMING VR IN MICROGRAVITY

2 PM-3:30 PM

`P&A`

Panelists
Sebastian Sylwan (CTO & Creative Partner)
Felix & Paul Studios

Michael Interbartolo (Moonshot Navigator)
NASA

Liz Warren (Associate Program Scientist)
CASIS

THE VFX OF NETFLIX SERIES

3:45 PM-5:15 PM

`P&A`

Panelists
Sean Santiago (Director, VFX, Netflix
Original Series)
Netflix

Chris White (VFX Supervisor)
Weta Digital

Aladino Debert (VFX Supervisor)
Digital Domain

Yvon Jardel (Animation Supervisor)
Rodeo FX

Paul Graff (VFX Supervisor)

Sue Rowe (VFX Supervisor)

Everett Burrell (VFX Supervisor)

FOR THE THRONE – THE MAKING OF "GAMES OF THRONES": SEASON 8

6:30 PM-8 PM

`P&A`

Panelists
Martin Hill (Visual Effects Supervisor)
Weta Digital

Thomas Schelesny (Visual Effects Supervisor)
Image Engine

Mohsen Mousavic (Visual Effects Supervisor)
Scanline

Sven Martin (Visual Effects Supervisor)
Pixomondo

THURSDAY, 1 AUGUST

"FIRST MAN": REDEFINING IN-CAMERA FX

10:45 AM-12:15 PM

`P&A`

Panelists
Michelle Eisenreich
Tristan Myles (DFX Supervisor)
DNEG

Ian Hunter (Miniature Effects Supervisor)
New Deal Studios

"ALITA: BATTLE ANGEL" - THE ART OF BEING HUMAN

2 PM-3:30 PM

`P&A`

Panelist
Nick Epstein (Visual Effects Supervisor)
Weta Digital

SWING INTO ANOTHER DIMENSION: THE MAKING OF "SPIDER-MAN: INTO THE SPIDER-VERSE"

3:45 PM-5:15 PM

`P&A`

Panelists
Danny Dimian (VFX Supervisor)
Joshua Beveridge (Animation Supervisor)
Bret St. Clair (Look Development Supervisor)
Pav Grochola (FX Supervisor)
Ben Hendricks (CG Supervisor)
Sony Pictures Imageworks

PRODUCTION GALLERY

■ ● ◆ ▲ ✦ ✺ `P&A` `A&D`

This one-of-a-kind exhibit recognizes the art, processes, and physical materials involved in the creation of major studio projects — not just the final piece on screen. The gallery features artwork, props, and more from recent film, VR, or game productions for an exclusive behind-the-scenes look at some of Hollywood's biggest blockbusters.

Hours
Sunday, 28 July, 11:30 AM-5:30 PM
Monday, 29 July, 9 AM-5:30 PM
Tuesday, 30 July, 9 AM-5:30 PM
Wednesday, 31 July, 9 AM-5:30 PM
Thursday, 1 August, 9 AM-2 PM

KEYS

REGISTRATION LEVELS
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INTEREST AREAS
`P&A` Production & Animation   `R&E` Research & Education   `A&D` Arts & Design   `G&I` Gaming & Interactive   `NT` New Technologies

Real-Time Live! showcases cutting-edge real-time technology with a captive, world-wide audience. Whether it's games, movies, simulation, virtual reality, augmented reality, or otherwise — there is no better opportunity for creators to plant roots and make a mark in real-time history. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/real-time-live/

Interest Areas: G&I NT P&A

HOURS

Tuesday, 30 July, 6 PM-7:45 PM

BEST REAL-TIME GRAPHICS AND INTERACTIVITY AWARD

Developers create and showcase the best real-time graphics and interactivity applications possible using today's technologies. The winning team is announced from the Real-Time Live! stage.

CAUSING CHAOS: PHYSICS AND DESTRUCTION IN UNREAL ENGINE

Michael Lentine
Jim Van Allen
Matthias Worch
Epic Games, Inc.

GAUGAN: SEMANTIC IMAGE SYNTHESIS WITH SPATIALLY ADAPTIVE NORMALIZATION

Taesung Park
University of California Berkeley

Ming-Yu Liu
Ting-Chun Wang
NVIDIA

Jun-Yan Zhu
MIT

LEVEL EX: TRACING ALL KINDS OF RAYS…ON MOBILE

Sam Glassenberg
Matthew Yaeger
Level Ex, Inc.

OLD SCHOOL/NEW COOL: DRIVING LIVE ENGAGEMENT THROUGH MIXED MEDIUMS IN REAL-TIME

Albert Lan
Michael Dolan
Voodoo Station

PROJECT NIRA: INSTANT INTERACTIVE REAL-TIME ACCESS TO MULTI-GIGABYTE SIZED 3D ASSETS ON ANY DEVICE

Arash Keissami
Andrew Johnson
dRaster, Inc.; Nira.app

Dario Manesku
dRaster, Inc.

QUIXEL'S REBIRTH: MEGASCANS ENVIRONMENT BREAKDOWN

Galen Davis
Quixel

REAL-TIME PROCEDURAL VFX CHARACTERS IN UNITY'S REAL-TIME SHORT FILM "THE HERETIC"

Veselin Efremov
Adrian Lazar
Unity Technologies

REAL-TIME, SINGLE CAMERA, DIGITAL HUMAN DEVELOPMENT

Doug Roble
Darren Hendler
Jeremy Buttell
Lonnie Iannazzo
Melissa Cell
Deer Li
Jason Briggs
Chad Reddick
Mark Williams
Lucio Moser
Cydney Wong
Dimitry Kachkovski
Jason Huang
Kai Zhang
David McLean
Rickey Cloudsdale
Dan Milling
Ron Miller
JT Lawrence
Chinyu Chien
Digital Domain

"REALITY VS ILLUSION" REAL-TIME RAY TRACING

Natalie Burke
Arisa Scott
Natalya Tatarchuk
Sebastien Lagarde
Unity Technologies

SPOOKY ACTION AT A DISTANCE: REAL-TIME VR INTERACTION FOR NON REAL-TIME REMOTE ROBOTICS

Pavel Savkin
Nathan Quinn
Lochlainn Wilson
SE4 Inc

VR HAIR SALON FOR AVATARS

Hao Li
Pinscreen, USC/ICT

Jun Xing
miHoYo Inc.

Koki Nagano
Liwen Hu
Pinscreen

Li-Yi Wei
Adobe Research

The Studio is a place to come and try out all the amazing technology and experiment with the ideas that surround us at SIGGRAPH. Sit down and create something, learn something, and collaborate. Let's make something. Let's play! For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/studio/

HOURS

Sunday, 28 July, 1:30 PM-5:30 PM
Monday, 29 July, 10 AM-5:30 PM
Tuesday, 30 July, 10 AM-5:30 PM
Wednesday, 31 July, 10 AM-5:30 PM
Thursday, 1 August, 10 AM-3:30 PM

STUDIO INSTALLATIONS

A&D

⊕ 3D PRINTING ON FABRIC

David Shorey
Shorey Designs

DRONEGRAFFITI: AUTONOMOUS MULTI-UAV SPRAY PAINTING

Anastasia Uryasheva
Tsuru Robotics, Skolkovo Institute of Science and Technology

Mikhail Kulbeda
Skolkovo Institute of Science and Technology

Nikita Rodichenko
Tsuru Robotics

Dzmitry Tsetserukou
Skolkovo Institute of Science and Technology

ENTRAIN: ENCOURAGING SOCIAL INTERACTION IN COLLECTIVE MUSIC MAKING

Hugo Scurto
Wanyu Liu
Benjamin Matuszewski
Frédéric Bevilacqua
STMS IRCAM-CNRS-SU

Jean-Louis Frechin
Uros Petrevski
Nodesign.net

Norbert Schnell
Furtwangen University

FRAGMENT SHADOW: GENERATING FRAGMENTED SHADOWS WITH MULTI-PROJECTORS GEOMETRY AND COLOR CALIBRATION

Shunichi Kasahara
Sony Computer Science Laboratories, Inc.;
University of Tokyo

Satoru Higa
Backspace Productions Inc.

Akihiro Komori
Koozyt, Inc.

IMVERSE LIVEMAKER - CREATE AND COMBINE VOLUMETRIC MODELS INTO A COMPLETE 3D INTERACTIVE SCENE INSIDE VR

Javier Bello Ruiz
Robin Mange
Alexander Manolov
Benoit Perrin
Charlotte Gubler
Kepa Iturrioz Zabala
Joaquim Bratschi
Imverse SA

PROGRAMMING EMBROIDERY WITH TURTLESTITCH

Ursula Wolz
RiverSound Solutions

Michael Aschauer
Andrea Mayr-Stalder
turtlestitch.org

Paulina Valdivieso
Bennington College

AnneMarie Webber
Mount Anthony Union High School

Tanya Dixon
RiverSound Solutions

KEYS

REGISTRATION LEVELS
■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S)
▲ Experiences (XP) ● Exhibits (E) ✦ Exhibitors (EX) ● Business Symposium (B)

INTEREST AREAS
P&A Production & Animation **R&E** Research & Education **A&D** Arts & Design **G&I** Gaming & Interactive **NT** New Technologies ⊕ Curated Content

SOURCE FORM

Sam Blanchard
Virginia Tech, School of Visual Arts

Jia-Bin Huang
Virginia Tech, Electrical and Computer Engineering

Christopher B. Williams
Viswanath Meenakshisundaram
Joseph Kubalak
Virginia Tech, Department of Mechanical Engineering

Sanket Lokegaonkar
Virginia Tech, Department of Computer Science

Tianyu Ge
Virginia Tech, School of Visual Arts

➕ SQUARING CIRCLES

BC Biermann
Heavy and Sons

STUDIO WORKSHOPS

SUNDAY, 28 JULY

⚛ LEDS AS SENSORS

2 PM - 3:30 PM

`NT`

Paul Dietz
Misapplied Sciences, Inc.

Ginger Alford
Southern Methodist University

➕ SEQUENCER CINEMATOGRAPHY WITH UNREAL ENGINE

3:45 PM - 5:15 PM

`G&I` `P&A`

Luis Cataldi
Epic Games

MONDAY, 29 JULY

➕ IMVERSE LIVEMAKER - CREATE AND COMBINE VOLUMETRIC MODELS INTO A COMPLETE 3D INTERACTIVE SCENE INSIDE VR

12 PM - 1:30 PM

`G&I` `NT`

Javier Bello Ruiz
Robin Mange
Benoit Perrin
Imverse SA

CODE CRAFTING WITH TURTLESTITCH

3:45 PM - 5:15 PM

`A&D` `NT`

Ursula Wolz
RiverSound Solutions, LLC

Michael Aschauer
Andrea Mayr-Stalder
turtlestitch.org

Arlene Marin
RiverSound Solutions, LLC

TUESDAY, 30 JULY

CREATIVE BRAINSTORMING IN AFTER EFFECTS

10 AM - 11:30 AM

`G&I` `P&A`

Candice Weber
Titmouse Animation

HANDS-ON: RAPID INTERACTIVE APPLICATION PROTOTYPING FOR MEDIA AND PERFORMING ARTS IN ILLIMITABLE SPACE

12 PM - 1:30 PM

`A&D`

Serguei Mokhov
Concordia University; mDreams Pictures, Inc; CCIFF.ca

Sudhir Mudur
Concordia University

➕ SPACE AS INTERFACE: CREATING INTERACTIVE STREET ART

2 PM - 3:30 PM

`A&D`

BC Biermann
Heavy and Sons; https://www.vxdlab.com

➕ 3D PRINTING ON FABRIC

3:45 PM - 5:15 PM

`A&D` `NT`

David Shorey
Shorey Designs

KEYS

REGISTRATION LEVELS
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- ✦ Exhibitors (EX)
- ⬤ Business Symposium (B)

INTEREST AREAS
- `P&A` Production & Animation
- `R&E` Research & Education
- `A&D` Arts & Design
- `G&I` Gaming & Interactive
- `NT` New Technologies

- ➕ Curated Content
- ⚛ Adaptive Tech
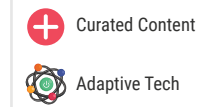
WEDNESDAY, 31 JULY

ADVANCED USE CASES FOR ANIMATION RIGGING IN UNITY

10 AM - 11:30 AM

`G&I` `P&A`

David Hunt
Olivier Dionne
Simon Bouvier-Zappa
Unity Technologies

TROUBLESHOOTING AND CLEANUP TECHNIQUES FOR 3D PRINTING

12 PM - 1:30 PM

`A&D` `NT`

Lance Winkel
University of Southern California

⊕ PHYSICS-BASED CHARACTER ANIMATION WITH CASCADEUR

2 PM - 3:30 PM

`G&I` `P&A`

Alexander Grishanin
Evgeniy Khapugin
Alexey Silantiev
Nekki Limited; Banzai Games

⊕ VOLUMETRIC LIGHTING AND EFFECTS IN UNREAL ENGINE 4

3:45 PM - 5:15 PM

`G&I` `P&A`

Tom Shannon
Epic Games

THURSDAY, 1 AUGUST

⊕ HIGH-FIDELITY LIGHTING WITH UNITY'S HIGH-DEFINITION RENDER PIPELINES

10 AM-11:30 AM

`G&I`

Laurent Harduin
Unity Technologies

FUSION360 AND SKETCHBOOK AS PARTNERS FOR CONCEPT DEVELOPMENT

12 PM - 1:30 PM

`A&D`

Jeffrey Smith
Autodesk

KEYS

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INTEREST AREAS

`P&A` Production & Animation   `R&E` Research & Education   `A&D` Arts & Design   `G&I` Gaming & Interactive   `NT` New Technologies   ⊕ Curated Content

SIGGRAPH Talks span topics across all of computer graphics and interactive techniques. These talks take the form of case studies, academic research, technical developments, improved pipeline tools, education and curriculum, professional development, or social commentary. For content descriptions, visit **https://s2019.siggraph.org/conference/programs-events/talks/**

Seating is on a first-come, first-served basis. Please arrive early for the talk you wish to attend.

SUNDAY, 28 JULY

BUILDING CHARACTER

10:45 AM-12:15 PM

`P&A` `A&D`

Creating Photoreal Creatures that Audiences Can Connect With

Michael Gregory
Dan Seddon
Moving Picture Company

From Comic Book to Movie Screen: Achieving Symbiosis Between Rigging and Creature Effects for "Venom"

Charlie Banks
Marco Dambros
William Gabrielle
Erica Vigilante
Jesus R. Nieto
Sylvain Brugnot
Martin Prazak
DNEG

Recreating BoPeep for "Toy Story 4"

Mara MacMahon
George Nguyen
Tanja Krampfert
Mariana Galindo
Radford Hurn
Carrie Hobson
Patty Kihm
Becki Tower
Pixar Animation Studios

VR/AR REAL MAGIC

10:45 AM-12:15 PM

`NT` `P&A`

A Look Into Five Years of Locomotion in Virtual Reality

Alex Silkin
Survios, Inc.

Mica: A Photoreal Character for Mixed Reality

Nafees Bin Zafar
Jonathan Litt
James Bancroft
Sean Comer
Thomas Miller
Takashi Kuribayashi
Magic Leap

Porting Your Virtual Reality Game to Oculus Quest

Eugene Elkin
Survios, Inc.

VR Theater Immersive Soundscape

Yao Wang
Sherry Li
ICTUS Audio

MAKING FACES

10:45 AM-12:15 PM

`P&A`

Mesh Wrap Based on Affine-Invariant Coordinates

Fernando de Goes
Pixar Animation Studios

Alonso Martinez
Google

Muscle-Based Facial Retargeting with Anatomical Constraints

Matthew D. Cong
Industrial Light & Magic

Ronald Fedkiw
Stanford University, Industrial Light & Magic

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SUNDAY, 28 JULY

Facial Pipeline in Playmobil: The Movie

Jeremy Ringard
Claude Levastre
ON Animation Studios

The Beauty of Breaking Rhythms: Affective Robot Motion Design Using JoHa-Kyu of Bunraku Puppet

Yang Chen
Ran Dong
Dongsheng Cai
The University of Tsukuba

Shinobu Nakagawa
Tomonari Higaki
The Osaka University of Arts

Nobuyoshi Asai
The University of Aizu

CLASSIC ART, CUTTING EDGE

2 PM-3:30 PM

`NT` `P&A`

The Making of "Age of Sail"

John Kahrs
Boathouse Studios

Kevin Dart
Chromosphere LA

Cassidy Curtis
Google Spotlight Stories

Scot Stafford
Pollen Music

Bone Mother: Making a 3D Printed Film

Dale Hayward
See Creature Productions, National Film Board of Canada

2D Animation in the VR Clouds: The Making of Disney's "A Kite's Tale"

Bruce Wright
Michael Anderson
Angela McBride
Henrik Falt
Daniel Peixe
Tony DeRosa
Walt Disney Animation Studios

SERIOUS VR

2 PM-3:30 PM

`NT` `P&A` `R&E`

Preserving Virtual Reality Artworks: A Museum Perspective

Jack McConchie
Tom Ensom
Tate

Experiences of Treating Phantom Limb Pain using Immersive Virtual Reality

James Marsh
Stephen Pettifer
Cliff Richardson
The University of Manchester

Jai Kulkarni
Manchester University NHS Foundation Trust

Immersivemote: Immersive Human- and Task-Aware Remote Operation

Pietro Lungaro
Konrad Tollmar
Royal Institute of Technology - KTH

Architecture Challenges in the Android 3D Graphics Stack

Pau Baiget
Google

SPECTACLE AND EVENTS

3:45 PM-5:15 PM

`P&A`

Childish Gambino's Pharos – Real-Time Dome Projection for Live Concert

Keith Miller
Weta Digital

MONDAY, 29 JULY

ADAPTING TO WORKING TOGETHER

3:45 PM-5:15 PM

`P&A`

La Noria: Making A Dark Animated Film

Carlos Baena
Nightwheel Pictures

Enhancing Emotional Intelligence in Project Management

Claudia Davis
Yale University

THIS IS A-NOISE-ING

3:45 PM-5:15 PM

`P&A` `R&E`

Machine-Learning Denoising in Feature Film Production

Henrik D. Dahlberg
Industrial Light & Magic

David M. Adler
Walt Disney Animation Studios

Jeremy Newlin
Pixar Animation Studios

MONDAY, 29 JULY

Sculpting Color Spaces

Yanli Zhao
Darryl Gouder
Rob Pieke
MPC R&D

Neural Pixel Error Detection

Erika Varis Doggett
Anna Wolak
The Walt Disney Company

Daphne Tsatsoulis
Nicholas McCarthy
Accenture

Boosting VFX Production with Deep Learning

Yanir Kleiman
Simon Pabst
Patrick Nagle
DNEG

TUESDAY, 30 JULY

HOW TO MAKE A WORLD

9 AM-10:30 AM

`NT` `P&A`

Cinematography: Into the Spider-Verse

David Morehead
Sony Pictures Animation, self

DMP without DMP, Full-CG Environments for The Lion King

Luca Bonatti
Marco Rolandi
Julien Bolbach
Kai Wolter
MPC Film

Dust and Cobwebs for "Toy Story 4"

Hosuk Chang
David Luoh
Pixar

Procedural System Assisted Authoring of Open-World Content for Marvel's Spider-Man

David Santiago
Insomniac Games

WINNING AT GAME PRODUCTION

9 AM-10:30 AM

`NT` `R&E`

A Scalable Real-Time Many-Shadowed-Light Rendering System

Bo Li
WB Games Montréal

Mortal Kombat 11: High Fidelity Cached Simulations in Real-Time

Jason Nadro
Matt Battaglia
Aren Voorhees
NetherRealm Studios

Why You Should(n't) Build Your Own Game Engine

Andrés Rivela
Digital Bandit Studios Inc.

Practical Dynamic Lighting for Large-Scale Game Environments

Kyungjoon Cho
Kwanghyeon Go
Daeil Kim
Pearl Abyss Corp

➕ THRIVE

10:45 AM-12:15 PM

`G&I`

Foundational Principles & Technologies for the Metaverse

Tim Sweeney
Epic Games

KALEIDOSCOPE EYES - DISPLAYS AND TRICKS

10:45 AM-12:15 PM

`R&E`

⚛ Adaptive Environments with Parallel Reality Displays

Paul H. Dietz
Matt Lathrop
Misapplied Sciences, Inc.

Depth Boost: Extended Depth Reconstruction Capability on Volumetric Display

Yamato Miyashita
Yasuhito Sawahata
Miwa Katayama
Kazuteru Komine
Japan Broadcasting Corporation

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➕ Curated Content
⚛ Adaptive Tech

TUESDAY, 30 JULY

From Light to Sound: Prisms and Auto-Zoom Lenses

Gianluca Memoli
Thomas J. Graham
Joshua T. Kybett
Arash Pouryazdan
University of Sussex

Visualization of Putting Trajectories in Live Golf Broadcasting

Masaki Takahashi
Takahito Ito
Hidehiko Okubo
Hideki Mitsumine
Japan Broadcasting Corporation (NHK), Science and Technology Research Laboratories

COMBUSTION

2 PM-3:30 PM

`P&A` `R&E`

Avengers: Endgame, A New Approach for Combustion Simulations

Gerardo Aguilera
John Johansson
Weta Digital

Physics-Based Combustion Simulation in Bifrost

Michael Nielsen
Konstantinos Stamatelos
Morten Bojsen-Hansen
Robert Bridson
Autodesk

Retiming of Fluid Simulations for VFX: Distributed Non-Linear Fluid Re-Timing by Sparse Bi-Directional Advection-Diffusion

Ken Museth
Weta Digital

What Time Is It? Efficient and Robust FX Retiming Workflow For Spies in Disguise

Ravindra Dwivedi
Jon Barry
Sean C McDuffee
Blue Sky Studios

HERE COMES THE SUN

3:45 PM-5:15 PM

`P&A`

Practical Lighting on "Toy Story 4"

Yaa-Lirng Tu
Tim Babb
Hosuk Chang
William T. Reeves
Pixar Animation Studios

Light Pruning on "Toy Story 4"

Vaibhav Vavilala
Pixar

Streamlining IBL Workflows with Computer Vision and USD

Stefano Cieri
Alexander Schwank
DNEG

DeepLight: Learning Illumination for Unconstrained Mobile Mixed Reality

Chloe LeGendre
Wan-Chun Ma
Graham Fyffe
John Flynn
Laurent Charbonnel
Jay Busch
Paul Debevec
Google Inc.

WEDNESDAY, 31 JULY

GETTING NEW PIPES

9 AM-10:30 AM

`P&A`

A Portal for Managing Reviews and Beyond

Danny Rerucha
Tommy Zhu
Andy Schott
Marley Gilb
Tracy Priest
Jennifer Brola
Blessan Abraham
Mark McGuire
Blue Sky Studios

Building Modern VFX Infrastructure

Natasha Kelkar
MPC

Conduit: A Modern Pipeline for the Open Source World

Oliver Staeubli
Tim Hoff
Ryan Bland
Rebecca Hallac
Josh Smeltzer
Chris Rydalch
Karyn B. Monschein
Mark McGuire
Blue Sky Studios

KEYS

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WEDNESDAY, 31 JULY

Integrate USD the Nodal Way, a Visual VFX Pipeline

Robin De Lillo
Guillaume Laforge
Rodeo FX

ELEANOR "RIGGING"-BY

2 PM-3:30 PM

`P&A`

Hierarchy Models: Building Blocks for Procedural Rigging

Sandy Kao
Michael Hutchinson
Kevin Ochs
Gilbert Davoud
Alex Powell
DreamWorks Animation

Flap Flap Away - Animation Cycle Multiplexing

Sandy Kao
Simon Otto
DreamWorks Animation

Sliding the Pieces into Place: Rigging the Pigeons of Spies in Disguise

Ferris Webby
Todd Hill
James Gu
Ozgur Aydogdu
Blue Sky Studios

Fast, Interpolationless Character Animation Through "Ephemeral" Rigging

Raf Anzovin
Raf Anzovin Productions

THURSDAY, 1 AUGUST

PERCEPTION IN RENDERING & HARDWARE

9 AM-10:30 AM

`NT` `R&E`

Autofocals: Evaluating Gaze-Contingent Eyeglasses for Presbyopes

Nitish Padmanaban
Robert Konrad
Gordon Wetzstein
Stanford University

Gaze-Contingent Ocular Parallax Rendering for Virtual Reality

Robert Konrad
Anastasios Nikolas Angelopoulos
Gordon Wetzstein
Stanford University

Foveated Displays: Toward Classification of the Emerging Field

Josef Spjut
Ben Boudaoud
NVIDIA

DeepFovea: Universal Neural Reconstruction for Foveated Rendering and Video Compression using Learned Statistics of Natural Videos

Anton Kaplanyan
Facebook Reality Labs

Thomas Leimkuehler
Facebook Reality Labs, MPI Saarbruecken

Anton Sochenov
Mikhail Okunev
Todd Goodall
Gizem Rufo
Facebook Reality Labs

HERE COMES THE GROOM AND RIG

10:45 AM-12:35 PM

`P&A`

Holding the Shape in Hair Simulation

Hayley Iben
Jacob Brooks
Christopher Bolwyn
Pixar Animation Studios

Hummingbird: DreamWorks Feather System

Nicholas Augello
David Tonnesen
Arunachalam Somasundaram
DreamWorks Animation

Mesh-Driven Generation and Animation of Groomed Feathers

Rasmus Haapaoja
Christoph Genzwuerker
MPC

Grasshopper: DreamWorks Environmental Simulation System

Chris De St. Jeor
Chris Michael
Arunachalam Somasundaram
Kurt Phillips
DreamWorks Animation

Optimizing Rig Manipulation with GPU and Parallel Evaluation

Andy Lin
John Kahwaty
Walter Yoder
Gene S. Lee
David Suroviec
Walt Disney Animation Studios
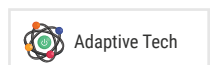
THURSDAY, 1 AUGUST

ALL TOGETHER NOW – CROWDS

2 PM-3:30 PM

NT P&A

Directable Stadium Crowds from Image Based Modeling for "Bohemian Rhapsody"

Ted Waine
DNEG

Optimizing Large Scale Crowds in Ralph Breaks the Internet

Le Joyce Tong
Josh Richards
Moe El-Ali
Tuan Nguyen
Walt Disney Animation Studios

Creating Ralphzilla: Moshpit, Skeleton Library and Automation Framework

Dong Joo Byun
Alberto Luceño Ros
Alexander Moaveni
Marc Bryant
Le Tong
Moe El-Ali
Walt Disney Animation Studios

A Ragdoll-Less Approach to Physical Animations of Characters in Vehicles

Hyojong Shin
Ubisoft Reflections

LUCY IN THE SKY WITH DIAMONDS – PROCESSING VISUALS

3:45 PM-5:15 PM

R&E

A Low-Discrepancy Sampler that Distributes Monte Carlo Errors as a Blue Noise in Screen Space

Eric Heitz
Laurent Belcour
Unity Technologies

Victor Ostromoukhov
David Coeurjolly
Jean-Claude Iehl
Univ. Lyon / CNRS

Global Adaptive Sampling Hierarchies in Production Ray Tracing

Keith Jeffery
DreamWorks Animation

Machine Learning for Multiple Scattering

Feng Xie
Stanford University

Taming the Shadow Terminator

Matt Jen-Yuan Chiang
Yining Karl Li
Brent Burley
Walt Disney Animation Studios

PRACTICAL FLUIDS

3:45 PM-5:15 PM

P&A

A Practical Guide to Thin Film and Drips Simulation

Alexey Stomakhin
Andrew Moffat
Gary Boyle
Weta Digital

InstaFalls: How To Train Your Waterfalls

Baptiste van Opstal
Youxi Woo
Amaury Aubel
DreamWorks Animation

Procedural Approach to Animation Driven Effects for "Avengers: Endgame"

Tobias Mack
Ashraf Ghoniem
Ruben Mayor
Gerardo Aguilera
Weta Digital

The Rigid Body and Fluid Dynamics of LAIKA's "Missing Link"

David Horsley
Peter Stua
LAIKA LLC

KEYS

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INTEREST AREAS

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The premier venue for disseminating and discussing new scholarly work in computer graphics technology and interactive techniques, Technical Papers allows attendees to witness the most visionary, innovative, and inspiring submissions and interact with the authors through Q&A. For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/technical-papers/

Technical Papers are published as a special issue of *ACM Transactions on Graphics*. In addition to papers selected by the SIGGRAPH 2019 Technical Papers Committee, the conference presents papers that have been published in ACM Transactions on Graphics during the past year.

Select Number of Technical Paper Authors to Present Posters at SIGGRAPH 2019

New this year, a select number of paper authors will be participating in the Poster Program. Check out their poster to get a taste of their research and then attend their presentation. Look for a list of these posters by visiting the Poster Program: https://s2019.siggraph.org/conference/programs-events/posters/

Seating is on a first-come, first-served basis. Please arrive early for the papers you wish to attend.

TECHNICAL PAPERS FAST FORWARD

Sunday, 28 July, 6 PM–8 PM

■ ●

Authors offer snack-sized summaries of SIGGRAPH 2019 Technical Papers with entertaining, illuminating summaries. Sponsored by Adobe Systems, Inc.

MONDAY, 29 JULY

1. IMAGE SCIENCE

10:45 AM–12:35 PM

R&E

Hyperparameter Optimization in Black-Box Image Processing Using Differentiable Proxies

Ethan Tseng
Felix Yu
Yuting Yang
Princeton University

Fahim Mannan
Karl St. Arnaud
Algolux

Derek Nowrouzezahrai
McGill University

Jean-Francois Lalonde
Université Laval

Felix Heide
Princeton University, Algolux

Handheld Multi-Frame Super-Resolution

Bartlomiej Wronski
Ignacio Garcia-Dorado
Manfred Ernst
Damien Kelly
Michael Krainin
Chia-Kai Liang
Marc Levoy
Peyman Milanfar
Google Inc.

A Unified Framework for Compression and Compressed Sensing of Light Fields and Light Field Videos

Ehsan Miandji
Saghi Hajisharif
Jonas Unger
Linköping University

MONDAY, 29 JULY

Local Light Field Fusion: Practical View Synthesis With Prescriptive Sampling Guidelines

Ben Mildenhall
Pratul P. Srinivasan
University of California, Berkeley

Rodrigo Ortiz-Cayon
Fyusion Inc.

Nima Khademi Kalantari
Texas A&M University

Ravi Ramamoorthi
University of California, San Diego

Ren Ng
University of California, Berkeley

Abhishek Kar
Fyusion Inc.

Synthetic Defocus and Look-Ahead Autofocus for Casual Videography

Cecilia Zhang
University of California, Berkeley

Kevin Matzen
Facebook, Cornell University

Vivien Nguyen
Dillon Yao
University of California, Berkeley

You Zhang
Chapman University Dodge College of Film and Media Arts

Ren Ng
University of California, Berkeley

2. SHAPE SCIENCE

10:45 AM-12:35 PM

R&E

Visual Smoothness of Polyhedral Surfaces

Davide Pellis
Martin Kilian
Felix Dellinger
TU Wien

Johannes Wallner
TU Graz

Helmut Pottmann
King Abdullah University of Science and Technology

Progressive Embedding

Hanxiao Shen
Zhongshi Jiang
Denis Zorin
Daniele Panozzo
New York University

Atlas Refinement With Bounded Packing Efficiency

Hao-Yu Liu
Xiao-Ming Fu
Chunyang Ye
Shuangming Chai
Ligang Liu
University of Science and Technology of China

Weaving Geodesic Foliations

Josh Vekhter
The University of Texas at Austin; Foolish Products, LLC

Jiacheng Zhuo
Luisa F. Gil Fandino
Qixing Huang
Etienne Vouga
The University of Texas at Austin

Gaussian-Product Subdivision Surfaces

Reinhold Preiner
Institute of Computer Graphics and Knowledge Visualization, Graz University of Technology

Tamy Boubekeur
LTCI, Telecom ParisTech, Institut Polytechnique de Paris

Michael Wimmer
Institute of Visual Computing & Human-Centered Technology, TU Wien

3. LIGHT SCIENCE

10:45 AM-12:35 PM

R&E

Hierarchical Russian Roulette for Vertex Connections

Yusuke Tokuyoshi
Square Enix Co., Ltd.

Takahiro Harada
Advanced Micro Devices, Inc.

Optimal Multiple Importance Sampling

Ivo Kondapaneni
Charles University, Prague

Petr Vévoda
Charles University, Prague; Render Legion, a. s.

Pascal Grittmann
Saarland University, Saarbrücken

Tomáš Skřivan
Institute of Science and Technology Austria

Philipp Slusallek
German Research Center for Artificial Intelligence; Saarland University, Saarbrücken

Jaroslav Křivánek
Charles University, Prague; Render Legion, a. s.

MONDAY, 29 JULY

Ellipsoidal Path Connections for Time-Gated Rendering

Adithya Pediredla
Rice University, Carnegie Mellon University

Ashok Veeraraghavan
Rice University

Ioannis Gkioulekas
Carnegie Mellon University

A Monte Carlo Framework for Rendering Speckle Statistics in Scattering Media

Chen Bar
Marina Alterman
Technion

Ioannis Gkioulekas
Carnegie Mellon University

Anat Levin
Technion

Rodent: Generating Renderers Without Writing a Generator

Arsène Pérard-Gayot
Saarland University

Richard Membarth
DFKI, Saarland University

Roland Leißa
Sebastian Hack
Saarland University

Philipp Slusallek
DFKI, Saarland University

TUESDAY, 30 JULY

4. CAPTURE CONTROL

9 AM–10:30 AM

G&I R&E

Deformation Capture via Soft and Stretchable Sensor Arrays

Oliver Glauser
ETH Zurich

Daniele Panozzo
New York University

Otmar Hilliges
Olga Sorkine-Hornung
ETH Zurich

Interactive Hand Pose Estimation Using a Stretch-Sensing Soft Glove

Oliver Glauser
Shihao Wu
ETH Zurich

Daniele Panozzo
New York University

Otmar Hilliges
Olga Sorkine-Hornung
ETH Zurich

Learning to Fly: Computational Controller Design for Hybrid UAVs With Reinforcement Learning

Jie Xu
Tao Du
Michael Foshey
Beichen Li
Massachusetts Institute of Technology

Bo Zhu
Dartmouth College

Adriana Schulz
University of Washington

Wojciech Matusik
Massachusetts Institute of Technology

Designing Chain Reaction Contraptions From Causal Graphs

Robin Roussel
University College London

Marie-Paule Cani
École Polytechnique

Jean-Claude Léon
Grenoble INP

Niloy J. Mitra
University College London

KEYS

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TUESDAY, 30 JULY

5. ADVANCED VOLUME RENDERING

9 AM-10:30 AM

`R&E`

Volume Path Guiding Based on Zero-Variance Random Walk Theory

Sebastian Herholz
University of Tübingen

Yangyang Zhao
McGill University

Oskar Elek
Charles University; University of California, Santa Cruz

Derek Nowrouzezahrai
McGill University

Hendrik P. A. Lensch
University of Tübingen

Jaroslav Krivanek
Charles University

A Null-Scattering Path Integral Formulation of Light Transport

Bailey Miller
Dartmouth College

Iliyan Georgiev
Autodesk

Wojciech Jarosz
Dartmouth College

Fractional Gaussian Fields for Modeling and Rendering of Spatially-Correlated Media

Jie Guo
Yanjun Chen
Bingyang Hu
State Key Lab for Novel Software Technology, Nanjing University

Ling-Qi Yan
University of California, Santa Barbara

Yanwen Guo
Yuntao Liu
State Key Lab for Novel Software Technology, Nanjing University

Photon Surfaces for Robust, Unbiased Volumetric Density Estimation

Xi Deng
Shaojie Jiao
Benedikt Bitterli
Wojciech Jarosz
Dartmouth College

6. HUMAN CAPTURE AND MODELING

10:45 AM-12:35 PM

`G&I` `R&E`

Creating Impactful Characters: Correcting Human Impact Accelerations Using High-Rate IMUs in Dynamic Activities

Calvin Kuo
Ziheng Liang
University of British Columbia

Ye Fan
University of British Columbia; Vital Mechanics Research, Inc.

Jean-Sébastien Blouin
University of British Columbia

Dinesh K. Pai
University of British Columbia; Vital Mechanics Research, Inc.

LiveCap: Real-Time Human Performance Capture From Monocular Video

Marc Habermann
Weipeng Xu
Max Planck Institute for Informatics

Michael Zollhoefer
Stanford University

Gerard Pons-Moll
Christian Theobalt
Max Planck Institute for Informatics

InteractionFusion: Real-Time Reconstruction of Hand Poses and Deformable Objects in Hand-Object Interactions

Hao Zhang
Zi-Hao Bo
Jun-Hai Yong
Feng Xu
Tsinghua University

Real-Time Pose and Shape Reconstruction of Two Interacting Hands With a Single Depth Camera

Franziska Mueller
Max Planck Institute for Informatics

Micah Davis
Universidad Rey Juan Carlos

Florian Bernard
Oleksandr Sotnychenko
Max Planck Institute for Informatics

Mickeal Verschoor
Miguel A. Otaduy
Dan Casas
Universidad Rey Juan Carlos

Christian Theobalt
Max Planck Institute for Informatics

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Accurate Markerless Jaw Tracking for Facial Performance Capture

Gaspard Zoss
DisneyResearch|Studios, ETH Zurich

Thabo Beeler
DisneyResearch|Studios

Markus Gross
DisneyResearch|Studios, ETH Zurich

Derek Bradley
DisneyResearch|Studios

7. MESHING

10:45 AM-12:35 PM

R&E

Parametrization Quantization With Free Boundaries for Trimmed Quad Meshing

Max Lyon
RWTH Aachen University

Marcel Campen
Osnabrück University

David Bommes
University of Bern

Leif Kobbelt
RWTH Aachen University

TriWild: Robust Triangulation With Curve Constraints

Yixin Hu
Teseo Schneider
New York University

Xifeng Gao
Florida State University

Qingnan Zhou
Adobe

Alec Jacobson
University of Toronto

Denis Zorin
Daniele Panozzo
New York University

Finding Hexahedrizations for Small Quadrangulations of the Sphere

Kilian Verhetsel
Jeanne Pellerin
Jean-François Remacle
Université catholique de Louvain

Harmonic Triangulations

Marc Alexa
TU Berlin

Navigating Intrinsic Triangulations

Nicholas Sharp
Carnegie Mellon University

Yousuf Soliman
Caltech

Keenan Crane
Carnegie Mellon University

8. HIGH PERFORMANCE RENDERING

10:45 AM-12:35 PM

R&E

Blockwise Multi-Order Feature Regression for Real-Time Path Tracing Reconstruction

Matias Koskela
Tampere University

Kalle Immonen
Vincit

Markku Mäkitalo
Alessandro Foi
Tampere University

Timo Viitanen
Nvidia

Pekka Jääskeläinen
Heikki Kultala
Jarmo Takala
Tampere University

Iterative Depth Warping

Sungkil Lee
Younguk Kim
Sungkyunkwan University

Elmar Eisemann
Delft University of Technology

Beyond Trilinear Interpolation: Higher Quality for Free

Balázs Csébfalvi
Budapest University of Technology and Economics

TUESDAY, 30 JULY

Procedural Phasor Noise

Thibault Tricard
Université de Lorraine, Inria

Semyon Efremov
Inria

Cédric Zanni
Université de Lorraine, Inria

Fabrice Neyret
Jonàs Martínez
Sylvain Lefebvre
Inria

TileGAN: Synthesis of Large-Scale Non-Homogeneous Textures

Anna Frühstück
Ibraheem Alhashim
Peter Wonka
KAUST

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9. PHOTO SCIENCE

2 PM–3:30 PM

`R&E`

Semantic Photo Manipulation With a Generative Image Prior

David Bau
Massachusetts Institute of Technology, MIT-IBM Watson AI Lab

Hendrik Strobelt
IBM Research, MIT-IBM Watson AI Lab

William Peebles
Jonas Wulff
Massachusetts Institute of Technology

Bolei Zhou
The Chinese University of Hong Kong

Jun-Yan Zhu
Antonio Torralba
Massachusetts Institute of Technology

Progressive Color Transfer With Dense Semantic Correspondences

Mingming He
Hong Kong University of Science and Technology

Jing Liao
City University of Hong Kong

Dongdong Chen
University of Science and Technology of China

Lu Yuan
Microsoft AI Perception and Mixed Reality

Pedro Sander
Hong Kong University of Science and Technology

The Face of Art: Landmark Detection and Geometric Style in Portraits

Jordan Yaniv
Yael Newman
Tel Aviv University

Ariel Shamir
The Interdisciplinary Center

Distortion-Free Wide-Angle Portraits on Camera Phones

YiChang Shih
Google Inc.

Wei-Sheng Lai
Chia-Kai Liang
Google Inc.; University of California, Merced

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10. TEXTILES AND FABRICATION

2 PM–3:30 PM

`R&E`

Wallpaper Pattern Alignment Along Garment Seams

Katja Wolff
Olga Sorkine-Hornung
ETH Zurich

Visual Knitting Machine Programming

Vidya Narayanan
Carnegie Mellon University

Kui Wu
Cem Yuksel
University of Utah

James McCann
Carnegie Mellon University

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Knittable Stitch Meshes

Kui Wu
Hannah Swan
Cem Yuksel
University of Utah, School of Computing

Computational Peeling Art Design

Hao Liu
Xiao-Teng Zhang
Xiao-Ming Fu
Zhi-Chao Dong
Ligang Liu
University of Science and Technology of China

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11. NEURAL RENDERING

3:45 PM-5:35 PM

R&E

Neural Volumes: Learning Dynamic Renderable Volumes From Images

Stephen Lombardi
Facebook, Inc.

Tomas Simon
Jason Saragih
Gabriel Schwartz
Andreas Lehrmann
Yaser Sheikh
Facebook, Inc.

Deferred Neural Rendering: Image Synthesis Using Neural Textures

Justus Thies
Technical University of Munich

Michael Zollhöfer
Stanford University

Matthias Nießner
Technical University of Munich

Neural Rendering and Reenactment of Human Actor Videos

Lingjie Liu
University of Hong Kong

Weipeng Xu
Max Planck Institute of Informatics

Michael Zollhoefer
Stanford University

Hyeongwoo Kim
Florian Bernard
Marc Habermann
Max Planck Institute of Informatics

Wenping Wang
University of Hong Kong

Christian Theobalt
Max Planck Institute of Informatics

VR Facial Animation via Multiview Image Translation

Shih-En Wei
Jason Saragih
Tomas Simon
Facebook Reality Labs

Adam W. Harley
Carnegie Mellon University

Stephen Lombardi
Michal Perdoch
Alexander Hypes
Dawei Wang
Hernan Badino
Yaser Sheikh
Facebook Reality Labs

Text-Based Editing of Talking-Head Video

Ohad Fried
Stanford University

Ayush Tewari
Max Planck Institute for Informatics

Michael Zollhöfer
Stanford University

Adam Finkelstein
Princeton University

Eli Shechtman
Adobe

Dan B. Goldman

Kyle Genova
Princeton University

Zeyu Jin
Adobe

Christian Theobalt
Max Planck Institute for Informatics

Maneesh Agrawala
Stanford University

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12. DEFORMATION AND FEM

3:45 PM-5:35 PM

R&E

Analytic Eigensystems for Isotropic Distortion Energies

Breannan Smith
Facebook Reality Labs

Fernando de Goes
Theodore Kim
Pixar Animation Studios

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Anisotropic Elasticity for Inversion-Safety and Element Rehabilitation

Theodore Kim
Fernando de Goes
Hayley Iben
Pixar Animation Studios

Decomposed Optimization Time Integrator for Large-Step Elastodynamics

Minchen Li
University of Pennsylvania, Adobe Research

Ming Gao
University of Pennsylvania

Timothy Langlois
Adobe Research

Chenfanfu Jiang
University of Pennsylvania

Danny M. Kaufman
Adobe Research

Affine Interpolation in a Lie Group Framework

Sumukh Bansal
Aditya Tatu
Dhirubhai Ambani Institute of Information and Communication Technology Gandhinagar

Poly-Spline Finite Element Method

Teseo Schneider
Jérémie Dumas
Xifeng Gao
New York University

Mario Botsch
Bielefeld University

Daniele Panozzo
Denis Zorin
New York University

WEDNESDAY, 31 JULY

13. LEARNING TO MOVE

9 AM-10:30 AM

R&E

Synthesis of Biologically Realistic Human Motion Using Joint Torque Actuation

Yifeng Jiang
Georgia Institute of Technology

Tom Van Wouwe
Friedl De Groote
KU Leuven

Karen Liu
Georgia Institute of Technology

Scalable Muscle-Actuated Human Simulation and Control

Seunghwan Lee
Seoul National University

Moonseok Park
Kyoungmin Lee
Seoul National University Bundang Hospital

Jehee Lee
Seoul National University

Physics-Based Full-Body Soccer Motion Control for Dribbling and Shooting

Seokpyo Hong
Korea Advanced Institute of Science and Technology

Daseong Han
Handong Global University

Kyungmin Cho
Korea Advanced Institute of Science and Technology

Joseph S. Shin (formerly Sung Yong Shin)
Korea Advanced Institute of Science and Technology, Handong Global University

Junyong Noh
Korea Advanced Institute of Science and Technology

Learning Character-Agnostic Motion for Motion Retargeting in 2D

Kfir Aberman
Tel-Aviv University; AICFVE, Beijing Film Academy

Rundi Wu
Peking University

Dani Lischinski
The Hebrew University of Jerusalem

Baoquan Chen
Peking University

Daniel Cohen-Or
Tel-Aviv University

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14. RELIGHTING AND VIEW SYNTHESIS

9 AM-10:30 AM

R&E

Deep View Synthesis from Sparse Photometric Images

Zexiang Xu
Sai Bi
University of California, San Diego

Kalyan Sunkavalli
Sunil Hadap
Adobe Research

Hao Su
Ravi Ramamoorthi
University of California, San Diego

Deep Reflectance Fields - High-Quality Facial Reflectance Field Inference from Color Gradient Illumination

Abhimitra Meka
Google, Max Planck Institute for Informatics

Christian Haene
Rohit Pandey
Google

Michael Zollhöfer
Stanford University

Sean Fanello
Graham Fyffe
Adarsh Kowdle
Xueming Yu
Jay Busch
Jason Dourgarian
Peter Denny
Sofien Bouaziz
Andrea Tagliasacchi
Peter Lincoln
Matt Whalen
Geoff Harvey
Jonathan Taylor
Shahram Izadi
Paul Debevec
Google

Christian Theobalt
Max Planck Institute for Informatics

Julien Valentin
Christoph Rhemann
Google

Multi-View Relighting Using a Geometry-Aware Network

Julien Philip
Inria, Université Côte d'Azur

Michael Gharbi
Adobe

Tinghui Zhou
Alexei Efros
University of California, Berkeley

George Drettakis
Inria, Université Côte d'Azur

Single Image Portrait Relighting

Tiancheng Sun
University of California, San Diego

Jonathan T. Barron
Yun-Ta Tsai
Google Research

Zexiang Xu
University of California, San Diego

Xueming Yu
Graham Fyffe
Christoph Rhemann
Jay Busch
Paul Debevec
Google

Ravi Ramamoorthi
University of California, San Diego

WEDNESDAY, 31 JULY

15. FABRICATION

10:45 AM-12:35 PM

`R&E`

LineUp: Computing Chain-based Physical Transformation

Minjing Yu
Zipeng Ye
Yong-Jin Liu
Tsinghua University

Ying He
Nanyang Technological University

Charlie C.L.Wang
The Chinese University of Hong Kong

Surface2Volume: Surface Segmentation Conforming Assemblable Volumetric Partition

Chrystiano Araujo
University of British Columbia

Daniela Cabiddu
Marco Attene
Marco Livesu
CNR-IMATI Genova

Nicholas Vining
Alla Sheffer
University of British Columbia

CurviSlicer: Slightly Curved Slicing for 3-axis printers

Jimmy Etienne
Université de Lorraine, Inria

Nicolas Ray
Inria

Daniele Panozzo
Courant Institute of Mathematical Sciences

Samuel Hornus
Inria

Charlie C.L.Wang
The Chinese University of Hong Kong

Jonas Martinez-Bayona
Inria

Sara McMains
University of California, Berkeley

Marc Alexa
TU Berlin

Brian Wyvill
University of Victoria, BC

Sylvain Lefebvre
Inria

Star-Shaped Metrics for Mechanical Metamaterial Design

Jonàs Martínez
Mélina Skouras
Inria

Christian Schumacher
ETH Zürich

Samuel Hornus
Sylvain Lefebvre
Inria

Bernhard Thomaszewski
Université de Montréal

X-Shells: A New Class of Deployable Beam Structures

Julian Panetta
Mina Konaković-Luković
Florin Isvoranu
EPFL

Etienne Bouleau
INGENI SA Genève

Mark Pauly
EPFL

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16. SCENE AND OBJECT RECONSTRUCTION

10:45 AM-12:35 PM

`R&E`

Plan3D: Viewpoint and Trajectory Optimization for Aerial Multi-View Stereo Reconstruction

Benjamin Hepp
Google, ETH Zurich - Computer Science

Matthias Niessner
Technical University of Munich

Otmar Hilliges
ETH Zurich

WEDNESDAY, 31 JULY

Multi-Robot Collaborative Dense Scene Reconstruction

Siyan Dong
Shandong University

Kai Xu
National University of Defense Technology

Qiang Zhou
Shandong University

Andrea Tagliasacchi
University of Victoria

Shiqing Xin
Shandong University

Matthias Nießner
Technical University of Munich

Baoquan Chen
Peking University

A Symmetric Objective Function for ICP

Szymon Rusinkiewicz
Princeton University

Warp-and-Project Tomography for Rapidly Deforming Objects

Guangming Zang
Ramzi Idoughi
Ran Tao
Gilles Lubineau
Peter Wonka
Wolfgang Heidrich
KAUST

Surface Reconstruction Based on Modified Gauss Formula

Wenjia Lu
Zuoqiang Shi
Jian Sun
Bin Wang
Tsinghua University

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17. TRANSPORT: PARALLEL AND OPTIMAL

10:45 AM-12:35 PM

R&E

Symmetric Moving Frames

Etienne Corman
University of Toronto

Keenan Crane
Carnegie Mellon University

Optimal Transport-Based Polar Interpolation of Directional Fields

Justin Solomon
MIT

Amir Vaxman
Utrecht University

The Vector Heat Method

Nicholas Sharp
Carnegie Mellon University

Yousuf Soliman
California Institute of Technology

Keenan Crane
Carnegie Mellon University

Vectorization of Line Drawings via PolyVector Fields

Mikhail Bessmeltsev
Université de Montréal, Informatique et de recherche opérationnelle

Justin Solomon
Massachusetts Institute of Technology - CSAIL

SPOT: Sliced Partial Optimal Transport

Nicolas Bonneel
David Coeurjolly
CNRS, Univ. Lyon

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18. OFF THE DEEP END

2 PM-3:30 PM

R&E

MeshCNN: A Network with an Edge

Rana Hanocka
Amir Hertz
Noa Fish
Raja Giryes
Tel Aviv University

Shachar Fleishman
Amazon

Daniel Cohen-Or
Tel Aviv University

KEYS

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SAGNet: Structure-Aware Generative Network for 3D-Shape Modeling

Zhijie Wu
Xiang Wang
Di Lin
Shenzhen University

Dani Lischinski
The Hebrew University of Jerusalem

Daniel Cohen-Or
Shenzhen University, Tel Aviv University

Hui Huang
Shenzhen University

GRAINS: Generative Recursive Autoencoders for INdoor Scenes

Manyi Li
Shandong University, Simon Fraser University

Akshay Gadi Patil
Simon Fraser University

Kai Xu
National University of Defense Technology School of Computer, AICFVE Beijing Film Academy

Siddhartha Chaudhuri
Adobe Research, IIT Bombay

Owais Khan
IIT Bombay

Ariel Shamir
The Interdisciplinary Center, Herzalia Computer Science

Changhe Tu
Shandong University

Baoquan Chen
Peking University

Daniel Cohen-Or
Tel Aviv University

Hao Zhang
Simon Fraser University

iMapper: Interaction-Guided Scene Mapping from Monocular Videos

Aron Monszpart
University College London, Niantic

Paul Guerrero
University College London

Duygu Ceylan
Adobe

Ersin Yumer
Uber ATG, Adobe

Niloy Mitra
University College London

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19. FLUIDS I

2 PM-3:30 PM

R&E

Interlinked SPH Pressure Solvers for Strong Fluid-Rigid Coupling

Christoph Gissler
Andreas Peer
University of Freiburg, FIFTY2 Technology GmbH

Stefan Band
University of Freiburg

Jan Bender
RWTH Aachen University

Matthias Teschner
University of Freiburg

On the Accurate Large-Scale Simulation of Ferrofluids

Libo Huang
Torsten Hädrich
Dominik L. Michels
KAUST

WEDNESDAY, 31 JULY

An Adaptive Variational Finite Difference Framework for Efficient Symmetric Octree Viscosity

Ryan Goldade
Yipeng Wang
University of Waterloo

Mridul Aanjaneya
Rutgers University

Christopher Batty
University of Waterloo

Mixing Sauces: A Viscosity Blending Model for Shear Thinning Fluids

Kentaro Nagasawa
Takayuki Suzuki
The University of Tokyo

Ryohei Seto
Kyoto University

Masato Okada
The University of Tokyo

Yonghao Yue
The University of Tokyo, Aoyama Gakuin University, University of Waterloo

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20. VR AND AR

3:45 PM-5:35 PM

NT · R&E

SurfaceBrush: From Virtual Reality Drawings to Manifold Surfaces

Enrique Rosales
University of British Columbia, Universidad Panamericana

Jafet Rodriguez
Universidad Panamericana

Alla Sheffer
University of British Columbia

Perceptual Rasterization for Head-mounted Display Image Synthesis

Sebastian Friston
Tobias Ritschel
Anthony Steed
University College London

Luminance-Contrast-Aware Foveated Rendering

Okan Tarhan Tursun
Max Planck Institute for Informatics

Elena Arabadzhiyska-Koleva
Saarland University, MMCI

Marek Wernikowski
Radosław Mantiuk
West Pomeranian University of Technology

Hans-Peter Seidel
Karol Myszkowski
Max Planck Institute for Informatics

Piotr Didyk
Università della Svizzera italiana

Foveated AR: Dynamically-Foveated Augmented Reality Display

Jonghyun Kim
NVIDIA

Youngmo Jeong
NVIDIA, Seoul National University

Michael Stengel
Kaan Akşit
Rachel Albert
Ben Boudaoud
Trey Greer
Joohwan Kim
Ward Lopes
Alexander Majercik
Peter Shirley
Josef Spjut
Morgan McGuire
David Luebke
NVIDIA

Vidgets: Modular Mechanical Widgets for Mobile Devices

Chang Xiao
Columbia University

Karl Bayer
Snap Inc.

Changxi Zheng
Columbia University

Shree Nayar
Snap Inc.

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21. MOTION IS IN CONTROL

3:45 PM-5:35 PM

R&E

Tangent-Space Optimization for Interactive Animation Control

Loïc Ciccone
ETH Zurich

Cengiz Öztireli
DisneyResearch|Studios

Robert W. Sumner
DisneyResearch|Studios, ETH Zurich

Vibration-Minimizing Motion Retargeting for Robotic Characters

Shayan Hoshyari
Disney Research, University of British Columbia

Hongyi Xu
Espen Knoop
Disney Research

Stelian Coros
ETH Zurich

Moritz Bächer
Disney Research

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Puppet Master: Robotic Animation of Marionettes

Simon Zimmermann
ETH Zurich

Roi Poranne
ETH Zurich, University of Haifa

James Bern
Stelian Coros
ETH Zurich

Non-Smooth Newton Methods for Deformable Multi-Body Dynamics

Miles Macklin
NVIDIA, University of Copenhagen - Computer Science

Kenny Erleben
University of Copenhagen - Computer Science

Matthias Müller
Nuttapong Chentanez
Stefan Jeschke
Viktor Makoviychuk
NVIDIA

RedMax: Efficient & Flexible Approach for Articulated Dynamics

Ying Wang
Nicholas J. Weidner
Margaret A. Baxter
Yura Hwang
Texas A&M University

Danny M. Kaufman
Adobe Research

Shinjiro Sueda
Texas A&M University

22. MAPS AND OPERATORS

3:45 PM-5:35 PM

R&E

Functional Characterization of Deformation Fields

Etienne Corman
University of Toronto

Maks Ovsjanikov
LIX, École Polytechnique, CNRS

Spectral Coarsening of Geometric Operators

Hsueh-Ti Derek Liu
Alec Jacobson
University of Toronto

Maks Ovsjanikov
École Polytechnique

Steklov Spectral Geometry for Extrinsic Shape Analysis

Yu Wang
Massachusetts Institute of Technology

Mirela Ben-Chen
Technion - Israel Institute of Technology

Iosif Polterovich
Université de Montréal

Justin Solomon
Massachusetts Institute of Technology

Tensor Maps for Synchronizing Heterogeneous Shape Collections

Qixing Huang
Zhenxiao Liang
UT Austin

Haoyun Wang
Tsinghua University

Simiao Zuo
Chandrajit Bajaj
UT Austin

Reversible Harmonic Maps between Discrete Surfaces

Danielle Ezuz
Technion Israel Institute of Technology

Justin Salomon
Massachusetts Institute of Technology

Mirela Ben-Chen
Technion - Israel Institute of Technology

THURSDAY, 1 AUGUST

23. VIDEO

9 AM-10:30 AM

R&E

Stylizing Video by Example

Ondřej Jamriška
Šárka Sochorová
Ondřej Texler
CTU in Prague, FEE

Michal Lukáč
Jakub Fišer
Jingwan Lu
Eli Shechtman
Adobe Research

Daniel Sýkora
CTU in Prague, FEE

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THURSDAY, 1 AUGUST

Video Extrapolation using Neighboring Frames

Sangwoo Lee
Jungjin Lee
KAI Inc.

Bumki Kim
KAIST, Visual Media Lab

Kyehyun Kim
KAIST, Visual Media Lab & KAI Inc.

Junyong Noh
KAIST, Visual Media Lab

Interactive and Automatic Navigation for 360 Video Playback

Kyoungkook Kang
Sunghyun Cho
DGIST

Joint Stabilization and Direction of 360 Degree Videos

Chengzhou Tang
Simon Fraser University

Oliver Wang
Adobe Systems Inc.

Feng Liu
Portland State University

Ping Tan
Simon Fraser University

24. FABRICATED RESULTS

9 AM-10:30 AM

`R&E`

Computational Design of Fabric Formwork

Xiaoting Zhang
Boston University

Guoxin Fang
TU Delft, The Chinese University of Hong Kong

Melina Skouras
INRIA

Gwenda Gieseler
TU Delft

Charlie Wang
The Chinese University of Hong Kong

Emily Whiting
Boston University

Volume-Aware Design of Composite Molds

Thomas Alderighi
Università di Pisa; ISTI-CNR, Pisa

Luigi Malomo
Daniela Giorgi
ISTI - CNR

Bernd Bickel
IST Austria

Paolo Cignoni
ISTI - CNR

Nico Pietroni
UTS Sydney, ISTI - CNR

Geometry-Aware Scattering Compensation for 3D Printing

Denis Sumin
Max-Planck-Institute for Informatics

Tobias Rittig
Charles University in Prague

Vahid Babaei
Max Planck Institute for Informatics

Thomas Nindel
Alexander Wilkie
Charles University in Prague

Piotr Didyk
Università della Svizzera italiana

Bernd Bickel
IST Austria

Jaroslav Krivanek
Charles University in Prague

Karol Myszkowski
Max Planck Institute for Informatics

Tim Weyrich
University College London

LayerCode: Optical Barcodes for 3D Printed Shapes

Henrique T. Maia
Columbia University

Dingzeyu Li
Adobe Research, Columbia University

Yuan Yang
Changxi Zheng
Columbia University

KEYS

REGISTRATION LEVELS
■ Full Conference Platinum (FP)   ★ Full Conference One-Day (FOD)   ● Full Conference (F)   ◆ Select Conference (S)
▲ Experiences (XP)   ● Exhibits (E)   ✦ Exhibitors (EX)   ● Business Symposium (B)

INTEREST AREAS
`P&A` Production & Animation   `R&E` Research & Education   `A&D` Arts & Design   `G&I` Gaming & Interactive   `NT` New Technologies

THURSDAY, 1 AUGUST

25. ANIMATION AND SKINNING

9 AM-10:30 AM

R&E

Direct Delta Mush Skinning and Variants

Binh Huy Le
Electronic Arts

JP Lewis
Google

NeuroSkinning: Automatic Skin Binding for Production Characters with Deep Graph Networks

Lijuan Liu
NetEase Fuxi AI Lab

Youyi Zheng
Zhejiang University

Di Tang
Yi Yuan
Changjie Fan
NetEase Fuxi AI Lab

Kun Zhou
Zhejiang University

Spline Interface for Intuitive Skinning Weight Editing

Seungbae Bang
Sung-Hee Lee
Korea Advanced Institute of Science and Technology

Hand Modeling and Simulation Using Stabilized Magnetic Resonance Imaging

Bohan Wang
George Matcuk
Jernej Barbic
University of Southern California

26. COMPUTATIONAL IMAGING

10:45 AM-12:15 PM

R&E

Coding Scheme Optimization for Fast Fluorescence Lifetime Imaging

Jongho Lee
Jenu Varghese Chacko
Bing Dai
Syed Azer Reza
Abdul Kader Sagar
Kevin W. Eliceiri
Andreas Velten
Mohit Gupta
University of Wisconsin-Madison

Non-Line-of-Sight Imaging with Partial Occluders and Surface Normals

Felix Heide
Matthew O'Toole
Kai Zang
David Lindell
Steven Diamond
Gordon Wetzstein
Stanford University

Wave-Based Non-Line-of-Sight Imaging Using Fast f-k Migration

David B. Lindell
Gordon Wetzstein
Stanford University

Matthew O'Toole
Carnegie Mellon University

Compact Snapshot Hyperspectral Imaging with Diffracted Rotation

Daniel S. Jeon
Seung-Hwan Baek
Shinyoung Yi
KAIST

Qiang Fu
Xiong Dun
Wolfgang Heidrich
KAUST

27. MPM AND COLLISION

10:45 AM-12:15 PM

R&E

Silly Rubber: An Implicit Material Point Method for Simulating Non-equilibrated Viscoelastic and Elastoplastic Solids

Yu Fang
Minchen Li
Ming Gao
Chenfanfu Jiang
University of Pennsylvania

CD-MPM: Continuum Damage Material Point Methods for Dynamic Fracture Animation

Joshuah Wolper
Yu Fang
Minchen Li
Jiecong Lu
Ming Gao
Chenfanfu Jiang
University of Pennsylvania

Efficient and Accurate Collision Response for Elastically Deformable Models

Mickeal Verschoor
Universidad Rey Juan Carlos

Andrei Jalba
Eindhoven University of Technology

KEYS

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

THURSDAY, 1 AUGUST

Implicit untangling: A Robust Solution for Modeling Layered Clothing

Thomas Buffet
Inria, Ecole Polytechnique

Damien Rohmer
Ecole Polytechnique

Loic Barthe
University of Toulouse - IRIT, Institut de Recherche en Informatique de Toulouse (IRIT)

Laurence Boissieux
Inria

Marie-Paule Cani
Ecole Polytechnique

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28. SOUND GRAPHICS

10:45 AM-12:15 PM

R&E

Learning to Optimize Halide with Tree Search and Random Programs

Andrew Adams
Facebook AI Research

Karima Ma
University of California, Berkeley; Facebook AI Research

Luke Anderson
Riyadh Baghdadi
Tzu-Mao Li
MIT CSAIL

Steven Johnson
Google

Michael Gharbi
Adobe

Benoit Steiner
Facebook AI Research

Kayvon Fatahalian
Stanford University

Fredo Durand
MIT CSAIL

Jonathan Ragan-Kelley
University of California, Berkeley

KleinPAT: Optimal Mode Conflation For Time-Domain Precomputation of Acoustic Transfer

Jui-Hsien Wang
Stanford University

Doug L. James
Stanford University, Pixar Animation Studios

Physically-Based Statistical Simulation of Rain Sound

Shiguang Liu
Haonan Cheng
Tianjin University

Yiying Tong
Michigan State University

Variational Implicit Point Set Surfaces

Zhiyang Huang
Washington University in St. Louis

Nathan Carr
Adobe Research

Tao Ju
Washington University in St. Louis

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29. MACHINE LEARNING FOR RENDERING

2 PM-3:30 PM

R&E

Sample-Based Monte Carlo Denoising using a Kernel-Splatting Network

Michael Gharbi
Adobe / MIT

Tzu-Mao Li
Miika Aittala
MIT

Jaakko Lehtinen
Aalto University

Fredo Durand
MIT

KEYS

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

THURSDAY, 1 AUGUST

Deep Convolutional Reconstruction For Gradient-Domain Rendering

Markus Kettunen
Erik Härkönen
Aalto University

Jaakko Lehtinen
Aalto University, Nvidia

Neural Importance Sampling

Thomas Müller
Disney Research, ETH Zürich

Brian McWilliams
Fabrice Rousselle
Disney Research

Markus Gross
Disney Research, ETH Zürich

Jan Novak
Disney Research

A Learned Shape-Adaptive Subsurface Scattering Model

Delio Vicini
EPFL

Vladlen Koltun
Intel Labs

Wenzel Jakob
EPFL

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30. FLUIDS II
2 PM-3:30 PM

R&E

Efficient and Conservative Fluids Using Bidirectional Mapping

Ziyin Qu
Xinxin Zhang
AICFVE, Beijing Film Academy

Ming Gao
Chenfanfu Jiang
University of Pennsylvania

Baoquan Chen
Peking University

On Bubble Rings and Ink Chandeliers

Marcel Padilla
Albert Chern
Felix Knöppel
Ulrich Pinkall
Technical University of Berlin

Peter Schröder
California Institute of Technology

Fundamental Solutions for Water Wave Animation

Camille Schreck
Christian Hafner
Chris Wojtan
Institute of Science and Technology Austria

Editing Fluid Animation using Flow Interpolation

Syuhei Sato
Prometech CG Research

Yoshinori Dobashi
Hokkaido University

Tomoyuki Nishita
Prometech CG Research, Hiroshima Shudo University

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31. DESIGN AND LAYOUT
2 PM-3:30 PM

R&E

Synthetic Silviculture: Multi-scale Modeling of Plant Ecosystems

Milosz Makowski
Adam Mickiewicz University in Poznan

Torsten Haedrich
Jan Scheffczyk
Dominik L. Michels
KAUST

Soeren Pirk
Google Brain

Wojtek Palubicki
Adam Mickiewicz University in Poznan

PlanIT: Planning and Instantiating Indoor Scenes with Relation Graph and Spatial Prior Networks

Kai Wang
Yu-An Lin
Ben Weissmann
Brown University

Manolis Savva
Angel Chang
Simon Fraser University

Daniel Ritchie
Brown University

KEYS

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INTEREST AREAS

P&A Production & Animation　R&E Research & Education　A&D Arts & Design　G&I Gaming & Interactive　NT New Technologies

THURSDAY, 1 AUGUST

Content-Aware Generative Modeling of Graphic Design Layouts

Xinru Zheng
Xiaotian Qiao
Ying Cao
Rynson Lau
City University of Hong Kong

EasyFont: A Style Learning-Based System to Easily Build Your Large-Scale Handwriting Fonts

Zhouhui Lian
Bo Zhao
Xudong Chen
Jianguo Xiao
Peking University, Institute of Computer Science and Technology

32. ACQUIRING, PERCEIVING AND RENDERING MATERIAL APPEARANCE

3:45 PM-5:15 PM

`R&E`

Deep Inverse Rendering for High-Resolution SVBRDF Estimation From an Arbitrary Number of Images

Duan Gao
Tsinghua University, Microsoft Research Asia

Xiao Li
University of Science and Technology of China, Microsoft Research Asia

Yue Dong
Microsoft Research Asia

Pieter Peers
College of William & Mary

Kun Xu
Tsinghua University

Xin Tong
Microsoft Research Asia

A Similarity Measure for Material Appearance

Manuel Lagunas
Sandra Malpica
Ana Serrano
Universidad de Zaragoza, I3A

Elena Garces
Universidad Rey Juan Carlos, Madrid

Diego Gutierrez
Belen Masia
Universidad de Zaragoza, I3A

Using Moments to Represent Bounded Signals for Spectral Rendering

Christoph Peters
Karlsruhe Institute of Technology

Sebastian Merzbach
University of Bonn

Johannes Hanika
Karlsruhe Institute of Technology, Weta Digital

Carsten Dachsbacher
Karlsruhe Institute of Technology

Accurate Appearance Preserving Prefiltering for Rendering Displacement-Mapped Surfaces

Lifan Wu
University of California, San Diego

Shuang Zhao
University of California, Irvine

Ling-Qi Yan
University of California, Santa Barbara

Ravi Ramamoorthi
University of California, San Diego

TECHNICAL PAPERS CLOSING SESSION

Thursday, 1 August, 5:15 PM-5:35 PM

Immediately following the last Technical Paper join us for a wrap-up of SIGGRAPH 2019, together with a look forward to next year's papers program with the SIGGRAPH 2020 Technical Papers Chair, Szymon Rusinkiewicz.

KEYS

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This program, housed within the Immersive Pavilion located in the Experience Hall, boasts an interactive space for attendees to discover the latest advancements in realities — games, research, healthcare, and more. The program is organized into three core physical spaces: the Arcade (games and experiences), the Museum, and the Village (installations). For content descriptions, visit https://s2019.siggraph.org/conference/programs-events/virtual-augmented-and-mixed-reality/

HOURS

Sunday, 28 July, 1:30 PM-5:30 PM
Monday, 29 July, 10 AM-5:30 PM
Tuesday, 30 July, 10 AM-5:30 PM
Wednesday, 31 July, 10 AM-5:30 PM
Thursday, 1 August, 10 AM-3:30 PM

ARCADE

BEACH BODY BROS
NT

Tyler Hurd
Gentle Manhands, Oculus

DADUM: EXPERIENCING MEMORIES OF MY FATHER
NT

Danilo Gasques
University of California San Diego; Arthur C. Clarke Center for Human Imagination

Bynhan Pham
University of California San Diego; Virbella

Jon Paden
Visual Arts, University of California San Diego

GLOOMY EYES
NT

Antoine Cayrol
ATLAS V

German Heller
3 DAR

NUCLEAR DISSENT
NT

Pablo Vio
Heather Phenix
Jam3

PIXEL RIPPED 1989
NT

Ana Ribeiro
Fernanda Martins
Pixel Ripped

PROJECT JUA
NT

Brian First
Raymond Ononiwu
Ayuba Audu
Dunni Abiodun
Microsoft

Max Sacker
Ioulia Isserlis
Another World

SPHERES
NT

Eliza McNitt
Pale Blue Dot

Jess Engel
Crimes of Curiosity

Dylan Golden
Protozoa Pictures

Arnaud Colinart
AtlusV

Darren Aronofsky
Protozoa Pictures

Joel Newton
CityLights

Ari Handel
Protozoa Pictures

KEYS

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INTEREST AREAS

P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

T.REX: SKELETON CREW

NT

Nicholas Bartzokas
Laura Moustakerski
Eozin Che
American Museum of Natural History

Chris Chin
Jad Boniface
Dario Laverde
HTC VIVE

Piotr Baczynski
Bartosz Roslonski
Immersion VR

Corrie Roe
American Museum of Natural History

Joanna Liu
New York University

MUSEUM

CITY OF SPARKLES

NT

Yang Liu
thatgamecompany

Botao Hu
Amber Garage

Ran Duan
Vanguard Sound

HETEROTOPIAS

NT

Szilvia Ruszev
Noa Kaplan
USC

IL DIVINO: MICHELANGELO'S SISTINE CEILING IN VR

Christopher Evans
Epic Games

MEU

NT

Sarah Hashkes
Radix Motion

MICA

John Monos
Alice Wroe
Magic Leap

REINCARNATION - VIRTUAL REALITY RECREATION OF YVES TANGUY'S WORLD

NT

Jing Yan
D2 Nova; Media Arts and Technology

Mengyu Chen
Media Arts and Technology

VILLAGE

AIR: AUGMENTED INTERSECTION OF REALITIES

NT

Christian Vazquez
Benjamin Reynolds
Anna Fuste
Hisham Bedri
Valentin Heun
PTC Reality Lab

AUTISM XR

NT

Marc Petz
Mary Musto
Laura Robinson
Keith Takens
Kent Career Tech Center

BEING HENRY

NT

Sarah Berkovich
Self/Oculus Launch Pad

DEEP REALITY: AN UNDERWATER VR EXPERIENCE TO PROMOTE RELAXATION BY UNCONSCIOUS HR, EDA AND BRAIN ACTIVITY BIOFEEDBACK

NT

Judith Amores Fernandez; Anna Fuste Lleixa;
MIT Media Lab

Robert Richer
FAU

Pattie Maes
MIT Media Lab

DRAWING SOUND IN MR SPACE

NT

Ryu Nakagawa
Ryo Komatsubara
Taku Ota
Ken Sonobe
Nagoya City University

Takahisa Mitsumori
Moph Records

Katsutoshi Hata
Nangok R/Studios Co.,Ltd

Hidefumi Ohmura
Tokyo University of Science

KEYS

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies   Adaptive Tech

ECLIPSE

NT

Jonathan Astruc
Aymeric Favre
Frederic Cussey
Frederic Lecompte
Jonathan Tamene
Frederic Plantard
Flavien Galliot
Paul Etienne Duclos
Darrin Taylor
BlackLight

NEURAL AR: IMMERSIVE AUGMENTED REALITY WITH REAL-TIME NEURAL STYLE TRANSFER

NT

Daiki Taniguchi
Akatsuki Inc.

NITRO

NT

Greg J. Tamargo
Marc Huet
JJ Castillo
Viewer Ready

OLLIE

NT

Sagar Ramesh
Drew Okenfuss
Zachary Flores
Annie Oh
University of Southern California

Carson Hall
SCAD

David Deedwania

OVS+TUMOR: A TOOL FOR ENHANCED LUNG TUMOR ANNOTATION IN VR FOR MACHINE LEARNING TRAINING AND ANALYSIS

NT

Santiago Lombeyda
Ashish Mahabal
California Institute of Technology

Daniel Crichton
Heather Kincaid
JPL

George Djorgovski
California Institute of Technology

Christos Patriotis
Sudhir Srivastava
National Cancer Institute

REMOTE SPATIAL PROGRAMMING AND COLLABORATION USING A REAL-TIME VOLUMETRIC CAPTURE SPACE

NT

Hisham Bedri
Ben Reynolds
Valentin Heun
Christian Vazquez
Anna Fuste
PTC

THE LAST OASIS

NT

Goro Fujita
Quill

VR MINECRAFT FOR ART

NT

Kyungjin Yoo
Ryan Havel
Nikhil Patel
UMD

WOLVES IN THE WALLS: CHAPTER 2, IT'S ALL OVER

NT

Peter Billington
Fable

WORLDSPACE PAINTING DATA VISUALIZATION

NT

Kyungjin Yoo
Dean Foster
UMD

KEYS

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INTEREST AREAS

P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

The VR Theater is a marquee destination that showcases state-of-the-art virtual reality storytelling. It is a juried program that is presented in a beautiful, panoramic theater and in colocated kiosks. For content descriptions and detailed ticketing information, visit https://s2019.siggraph.org/conference/programs-events/computer-animation-festival/vr-theater/

SCREENINGS

■ ● P&A G&I

Sunday, 28 July - 1:15 PM , 2:15 PM, 3:15 PM, 4:15 PM (Full Conference Platinum Registrants only)

Monday, 29 July - 8:45 AM, 9:45 AM, 10:45 AM, 11:45 AM, 1:45 PM, 2:45 PM, 3:45 PM

Tuesday, 30 July - 8:45 AM, 9:45 AM, 10:45 AM, 11:45 AM, 1:45 PM, 2:45 PM, 3:45 PM

Wednesday, 31 July - 8:45 AM, 9:45 AM, 10:45 AM, 11:45 AM, 1:45 PM, 2:45 PM, 3:45 PM

Thursday, 1 August - 8:45 AM, 9:45 AM, 10:45 AM, 12:45 PM, 1:45 PM

2nd Step

Joerg Courtial
Faber Courtial (Germany)

Bonfire

Larry Cutler
Baobab Studios (United States)

Doctor Who: The Runaway

Mathias Chelebourg
BBC VR Hub, BBC Doctor Who, Passion Animation Studios (United Kingdom)

Kaiju Confidential

Ethan Shaftel
easyAction, ShadowMachine (United States)

A Kite's Tale

Bruce Wright
Walt Disney Animation Studios (United States)

KIOSKS

■ ● ◆ ▲ ✦ ❋ P&A G&I

Sunday, 28 July, 1:30 PM-5:30 PM

Monday, 29 July, 10 AM-5:30 PM

Tuesday, 30 July, 10 AM-5:30 PM

Wednesday, 31 July, 10 AM-5:30 PM

Thursday, 1 August, 10 AM-3:30 PM

1inch VR

Seok Nam Koong
M2S (South Korea)

Age of Sail

John Kahrs
Boathouse Studios, Google Spotlight Stories (United States)

The bOnd

Olly Reid
Axis Studios (United Kingdom)

Children Do Not Play War

Fabiano Mixo
VILD Studio (Brazil)

Ghost Fleet VR

Lucas Gath
Catovia LLC (United States)

The Great C

Steve Miller
Secret Location (Canada)

Inside Hurricane Maria in 360 degrees

Gregory Shirah
NASA/GSFC - Scientific Visualization Studio (United States)

Jurassic World: Blue

Felix Lajeunesse, Paul Raphael
Felix & Paul Studios (Canada)

MindPalace

Carl Krause
Filmakademie Baden-Württemberg (Germany)

Traveling While Black

Roger Ross Williams
Felix & Paul Studios (Canada)

KEYS

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INTEREST AREAS

P&A Production & Animation R&E Research & Education A&D Arts & Design G&I Gaming & Interactive NT New Technologies

ACM SIGGRAPH is an international community of researchers, artists, practitioners, and business professionals who share an interest in computer graphics and interactive techniques. At SIGGRAPH 2019, ACM SIGGRAPH offers a diverse menu of programs and services for its members and the computer graphics community. For full event descriptions, visit https://s2019.siggraph.org/conference/programs-events/organization-events/

DIVERSITY & INCLUSION SUMMIT
Sunday, 28 July, 8:40 AM-5:30 PM

The ACM SIGGRAPH Diversity and Inclusion Summit is a full-day workshop with a roster of informative and impactful speakers from a range of backgrounds and disciplines that demonstrate how our diversity makes us stronger. We invite you to join us for captivating discussions as we examine the pressing issues and relevant topics facing the computer graphics and interactive techniques community. Sessions include:

The Case for Diversity and the Lens of Intersectionality

Rendering Gender: Identity, Representation, and Sexuality in 3D Design, Interactive Media, and Animation

HERstories: Women Leaders in the Digital World

Inclusion of Diverse Talent With Outstanding Abilities

Diversity, Collaboration, and Building Toward an Inclusive Organization

Is AI Biased & Can AI Be Ethical?

DOCTORAL CONSORTIUM
Saturday, 27 July, 9 AM-6 PM

Ph.D. students meet and discuss work with one another and a panel of experienced SIGGRAPH researchers.

FRONTIERS TALKS AND WORKSHOPS
Saturday, 27 July, 9 AM-6 PM

The ACM SIGGRAPH Frontiers program (talks and workshops) showcases perspectives on emerging and adjacent areas of interest to the SIGGRAPH community.

Talks
Sunday, 28 July-Thursday, 1 August, 8 AM-8:45 AM

The ACM SIGGRAPH Frontiers Talks will engage our audiences with the groundbreaking work being done alongside our industry with the tools and foundations developed within our own community.

From Next Generation Display Devices, to Visualization and Simulation to communicate highly complex data artistically, tools developed to assist professionals are now impacting individuals, and the conversation is just getting started! Schedule is incomplete and subject to change.

For an updated list of Frontiers Talks, visit: https://s2019.siggraph.org/conference/programs-events/acm-siggraph-frontiers/

How Computer Graphics Expertise Will Further the State of the Art in Machine Learning

Martin Wicke
Google

Imaging a Black Hole with the Event Horizon Telescope

Katherine Bouman
California Institute of Technology

KEYS

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INTEREST AREAS
P&A Production & Animation   R&E Research & Education   A&D Arts & Design   G&I Gaming & Interactive   NT New Technologies

Workshops

Sunday, 28 July, 9 AM-5 PM

Computer Graphics for Autonomous Vehicles

Organizers

Jose A. Iglesias-Guitian
Computer Vision Center, Universitat Autonoma de Barcelona

German Ros
Intel Labs

Vangelis Kokkevis
Toyota Research Institute

Jose M. Alvarez
NVIDIA Corporation

Yongjoon Lee
Zoox

Philipp Slusallek
Saarland University

Content Generation for Workforce Training

Organizer

Holly Rushmeier
Yale University

Textiles: Virtual to Actual

Organizer

James McCann
Carnegie Mellon University

Sim-to-Real: From Skilled Virtual Agents to Real-World Robots

Organizer

Stelian Coros
ETH Zurich

Immersive Visualization

Organizer

Tomasz Bednarz
CSIRO Data61, UNSW Art & Design

Cybersickness: Causes and Solutions

Organizer

Bas Rokers
New York University

Kay Stanney
Design Interactive

STUDENT RESEARCH COMPETITION

Wednesday, 31 July, 3:45-5:15 PM

Sponsored by Microsoft the Student Research Competition at SIGGRAPH 2019 offers a unique forum for undergraduate and graduate students to present their original research at well-known ACM sponsored and co-sponsored conferences before a panel of judges and attendees.

THESIS FAST FORWARD

Tuesday, 30 July, 2-3:30 PM

Up to 12 candidates share three-minute oral presentations of innovative ideas live at a special session at SIGGRAPH 2019.

ACM SIGGRAPH TOWN HALLS

For descriptions and room information, visit: https://s2019.siggraph.org/conference/programs-events/acm-siggraph-town-halls/

The Future: Shaping Our Field

Monday, 29 July, 10:45 AM-12:15 PM

What Can ACM SIGGRAPH Do for You?

Tuesday, 30 July, 10:45 AM-12:15 PM

Meet the Candidates

Tuesday, 30 July, 5:15-6 PM

ACM SIGGRAPH Frontiers

Wednesday, 31 July, 10:45 AM- 12:15 PM

CO-LOCATED EVENTS

SIGGRAPH works with other aligned organizations to present additional opportunities for attendees to learn and network during the SIGGRAPH conference week.

ACM SIGGRAPH / Eurographics Symposium on Computer Animation 2019 (SCA 2019)

26-28 July

Los Angeles, California
https://sca2019.kaist.ac.kr/wordpress/

DigiPro2019 (Digital Production Symposium 2019)

27 July

Millenium Biltmore Hotel
Los Angeles, California
http://dp2019.digiproconf.org

KEYS

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ACM SIGGRAPH THEATER EVENTS

FP F S XP E EX B

Informative international sessions on the current state of computer graphics around the world, organized by representatives of ACM SIGGRAPH and affiliated societies. For event descriptions, visit https://s2019.siggraph.org/conference/programs-events/organization-events/acm-siggraph-theater-events/

SUNDAY, 28 JULY

BIRDS OF A FEATHER: THE INTERNATIONAL COLLEGIATE VIRTUAL REALITY CONTEST (IVRC)

10 AM-11 AM

NT

CG IN ASIA

11:30 AM-12:30 PM

P&A

SIGGRAPH FOR BEGINNERS - GENERAL VIEW

12:30 PM-1:30 PM

SIGGRAPH IN JAPANESE + JAPAN CG SHOWCASE

1:30 PM-3 PM

DAC: OPEN FORUM OF THE ACM SIGGRAPH DIGITAL ARTS COMMUNITY

3 PM-4:30 PM

A&D

BIRDS OF A FEATHER: DEMOSCENE WORLDWIDE

4:30 PM-5:30 PM

P&A

MONDAY, 29 JULY

BIRDS OF A FEATHER: THE IMMERSIVE VISUALISATION FOR SCIENCE, RESEARCH AND ART

9 AM-11 AM

A&D

CG IN AUSTRALASIA

11 AM-12 PM

R&E

BIRDS OF A FEATHER: ACM SIGGRAPH CARTOGRAPHIC VISUALIZATION

12 PM-1:30 PM

R&E

BIRDS OF A FEATHER: SHENZHEN & LOS ANGELES CHAPTERS MEETUP

3:30 PM-4:30 PM

BIRDS OF A FEATHER: VIRTUAL BEINGS WORLD

4:30 PM-6 PM

NT

TUESDAY, 30 JULY

BIRDS OF A FEATHER: ACROSS THE METAVERSE

9:30 AM-10:30 AM

R&E

BIRDS OF A FEATHER: MASSIVE COLLABORATIVE PROJECT

10:30 AM-12:00 PM

R&E

CG IN EUROPE

12 PM-1 PM

G&I

CG IN AFRICA + MIDDLE EAST

1 PM-2 PM

R&E

KEYS

REGISTRATION LEVELS ■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S) ▲ Experiences (XP) ● Exhibits (E) ✦ Exhibitors (EX) ● Business Symposium (B)

INTEREST AREAS P&A Production & Animation R&E Research & Education A&D Arts & Design G&I Gaming & Interactive NT New Technologies

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TUESDAY, 30 JULY

ACM: THESIS FAST FORWARD

2 PM-3:30 PM

`R&E`

CG IN LATIN AMERICA

3:30 PM-4:30 PM

ACM SIGGRAPH TOWN HALL: MEET THE CANDIDATES

5 PM-6 PM

WEDNESDAY, 31 JULY

ACM SIGGRAPH CHAPTERS FAST FORWARD AND STARTUP MEETING

9 AM-11 AM

WOMEN IN CG

11:00 AM-12:00 PM

`P&A`

BIRDS OF A FEATHER: HOW THE LEADERS IN VOLUMETRIC VIDEO CAPTURE WORK TOGETHER TODAY

12:00 PM-1:00 PM

`R&E`

BIRDS OF A FEATHER: ISEA INTERNATIONAL - OPEN FORUM

1:00 PM-2.00 PM

`A&D`

BIRDS OF A FEATHER: DCAJ PRESENTATION "INDUSTRIAL APPLICATION OF CONTENT TECHNOLOGY IN JAPAN"

2:00 PM-3:00 PM

`NT` `R&E`

DAC: THE HISTORY OF SIGGRAPH ART SHOWS: INTERCONNECTIONS, INNOVATIONS & INSIGHT

3:00 PM-4:30 PM

`A&D`

EXTERNAL RELATION: MEET THE PARTNERS!

4:30 PM-5:30 PM

THURSDAY, 1 AUGUST

DAC: ACM SIGGRAPH DIGITAL ART COMMUNITY ONLINE EXHIBITIONS: OVERVIEW AND OPPORTUNITIES

9 AM-10 AM

`A&D`

THE UNDERGRADUATE RESEARCH ALLIANCE

10 AM-11:30 AM

`R&E`

KEYS

REGISTRATION LEVELS
■ Full Conference Platinum (FP) ★ Full Conference One-Day (FOD) ● Full Conference (F) ◆ Select Conference (S)
▲ Experiences (XP) ⬟ Exhibits (E) ✦ Exhibitors (EX) ⬤ Business Symposium (B)

INTEREST AREAS
`P&A` Production & Animation   `R&E` Research & Education   `A&D` Arts & Design   `G&I` Gaming & Interactive   `NT` New Technologies

At the SIGGRAPH Exhibition, you're invited to check out the newest hardware systems, software tools, and creative services from hundreds of companies. Slip on the latest VR/AR/MR goggles, get your hands on the stylus of the latest animation tool, and much more.

EXHIBITION HOURS

Tuesday, 30 July, 9:30 AM-6:00 PM
Wednesday, 31 July, 9:30 AM-6:00 PM
Thursday, 1 August, 9:30 AM-3:30 PM

EXHIBITOR LIST (AS OF 6 JUNE)

3DMapMaker

3dMD

4DAGE Technology Co., Ltd.

4DViews

Academy of Art University

Advanced Micro Devices (AMD)

Aleph Objects, Inc.

Allied Powers LLC

Alt, Inc.

Animation Magazine

The Animation Workshop TAW, Via University College

Arskan

ASUS Global Pte. Limited

Autodesk

AWS

Beijing Noitom technology LTD

Blackmagic Design

Blender Foundation

Boris FX

BOXX

C2Monster

Cap Digital - France

Carbon, Inc.

Carl Zeiss AG

Carnegie Mellon ETC

CGAL - The Computational Geometry Algorithms Library

CGTrader

Ciara Technologies

CLO Virtual Fashion Inc.

Computer Graphics World

Conductor Technologies

Consulate General of the Czech Republic in Los Angeles & CzechInvest San Francisco

Datatang Technology INC.

Dell Inc.

Dexta Robotics

DGG

Digi Space Co., LTD

Dimensional Imaging (DI4D)

Drexel University

Dwarf Animation Studio

Dynamixyz

Eclipse Tech, LLC

Eizo Inc.

Emile Cohl Art Academy

Environmental Systems Research Institute

Epic Games - Unreal Engine

Exceptional Minds

Exothermic Systems LLC

FaceUnity Technology

Faceware Tech

FARO Technologies Inc

FLIR Systems, Inc. (formerly Point Grey)

Flux Planet

Formlabs Inc.

FORUM8 Co., Ltd.

Foundry

Fox Renderfarm

Fraunhofer IIS

ftrack

Glassbox

Golaem

Gold Array Technology Beijing LLC

Google

hyprsense

IATSE

ICVR

IncrediBuild

Ino-VR

InstaLOD

Intel Corporation

International Computer Concepts (ICC)

Inventive Software LLC

InviziTrak

IO Industries

IOGEAR

KeenTools

KyungHee University

Lemnis Technologies

Luxion, Inc.

MatterHackers, Inc.

MAXON

Mercernaries Engineering

Microsoft Corporation

Mocap Now

Motion Analysis Corporation

MSI Computer Corp.

Mura Vision

NorPix Inc.

Fox Renderfarm

NVIDIA Corporation

Observer Analytics

Oculus Medium

One Stop Systems

OptiTrack

OTOY, Inc.

Ouster

Paris Region

Part Time Evil

Persistant Studios

Pixel Plow

PNY Technologies

Pogo Linux

PolyPort Inc.

QNAP, Inc.

The Qt Company

Qualisys

Quantum Corporation

Qumulo

Raise3D Technologies

Ranch Computing

RAVE Computer

Reallusion Inc.

Redshift Rendering Technologies, Inc

Ringling College of Art and Design

Rizom-Lab

Rokoko

ROOT Data Center

Russian3DScanner

Safe Software

SCAD

The Scan Truck

SF FILM SCHOOL

Sharecg.com

SideFX Software

Sketchfab Inc.

Speedernet Sphere

SpeedTree

The Studio - B&H

Substance by Adobe

SynTouch Inc.

T.OZ

Taiwan Pavilion

TechViz

Terathon Software

Tobii Pro

Toolchefs Ltd

TV Paint

Unity Technologies

The University of the Arts

UST Global Media Services

V.DO Inc

VectorZero, Inc.

Vicon

ViewSonic

VIRTUALITICS

Visual Computing Center at KAUST

Volograms

VR Cambrian

VRSQUARE

Wacom Technology

Web3D Consortium

Wrnch inc.

Wysilab

Xsens Technologies B.V.

Yadle

z-emotion

FP · F · S · XP · E · EX · B

Comprehensive summaries of the latest technologies in computer graphics and interactive techniques. SIGGRAPH 2019 exhibitors demonstrate software, hardware, and systems; answer questions; and host one-on-one conversations about how their applications improve professional and technical performance.

For an updated list and to learn more about exhibitor sessions, please visit https://s2019.siggraph.org/exhibition/exhibitor-sessions/

AUTODESK VISION SERIES

Room 404A

30 July

10:15 AM-11 AM: Bifrost – It's here!

11:30 AM-12:15 PM: What's new with Arnold GPU

12:45 PM-1:30 PM: Human + AI = Future of Creation and Entertainment

2 PM-2:45 PM: Open Source support at Autodesk – USD focus

3:15 PM-4 PM: Maya: Faster Animation, Artist Workflows, and the Future

4:30 PM-5:15 PM: Thriving with Shotgun: Setting Creative Teams Up for Success

31 July

9:30 AM-10 AM: Autodesk Forge - Automate unique, web-based 3D data experiences

10:15 AM-11 AM: Bifrost – It's here!

11:30 AM-12:15 PM: 3ds Max: producing high-end results at scale without sacrificing quality

12:45 PM-1:30 PM: Unity and Autodesk: Streamlining Workflows for Film/Animation/TV

2 PM-2:45 PM: Interactive and flexible rendering workflows with Arnold Operators

3:15 PM-4 PM: Open Source support at Autodesk – MaterialX focus

4:30 PM-5:15 PM: Autodesk Flame – AI revolutionizes common tasks for VFX Compositing and Color Finishing

AWS: CLOUD TECH TALKS

Room 303B
31 July, 9:30 AM-5:30 PM

BLUE SKY STUDIOS: RESUME DROP OFF AND OPEN HOUSE AT SIGGRAPH

Room 301A
31 July, 10 AM-4 PM

CARBON: COMPUTATIONAL GEOMETRY AND SOFTWARE

Room 511B/C
31 July, 10:30 AM-11:30 AM

CGTRADER: LEVERAGING STACK 3D CONTENT TO ACCELERATE TIME TO MARKET AND REDUCE COSTS

Room 511B/C
30 July, 10:30 AM-11:30 AM

CHAOS GROUP

Room 409A

30 July

10 AM-11 AM: Total Chaos @ SIGGRAPH session 1
11 AM-12 PM: Total Chaos @ SIGGRAPH session 2
2 PM-3 PM: Total Chaos @ SIGGRAPH session 3
3 PM-4 PM: Total Chaos @ SIGGRAPH session 4
4 PM-5 PM: Total Chaos @ SIGGRAPH session 5

31 July

10 AM-11 AM: Total Chaos @ SIGGRAPH session 6
11 AM-12 PM: Total Chaos @ SIGGRAPH session 7
2 PM-3 PM: Total Chaos @ SIGGRAPH session 8
3 PM-4 PM: Total Chaos @ SIGGRAPH session 9
4 PM-5 PM: Total Chaos @ SIGGRAPH session 10

DEXTA ROBOTICS: WHAT MAKES FORCE FEEDBACK GLOVES THE MOST INTUITIVE INTERACTION METHOD

Room 511B/C
31 July, 3:30 PM-4:30 PM

FOUNDRY

Room 502B

29 July

12 PM-1:30 PM: Education Summit

4 PM-6 PM: Look Development and Lighting Meetup

30 July

10 AM-11:30 AM: Plotting Your VFX Studio's Journey Into The Cloud

12 PM-1:30 PM: Solving Creative Challenges with Nuke Family - The Artists' Story

2 PM-3:30 PM: Solving Creative Challenges Through Development in Nuke

4 PM-6 PM: Solving Creative Challenges with Modo

INTEL

Room 406B

29 July

11 AM-12 PM: Intel Open Image Denoise : Optimized CPU Denoising

12:30 PM-1:30 PM: Using Variable Rate Shading to improve the user experience in real-time game engines

3:30 PM-4:30 PM: Ray Tracing with Intel Embree and Intel OSPRay : Use Cases and Updates

INTEL

Room 406B

30 July

9 AM-10 AM: Bringing the future of entertainment to your living room: MPEG-I Immersive Video

11 AM-12 PM: From RenderMan 22.0® to Next Gen RenderMan XPU and Beyond: Role of Open Shading Language (OSL) with Intel® AVX512.

1 PM-2 PM: Bringing Intelligent Motion using Reinforcement Learning to Intel® Client Platform

2:30 PM-3:30 PM: Build a Deep Learning Video Analytics Framework for Intel AI Platforms

31 July

9 AM-10 AM: Advanced SIMD programming with Intel ISPC

11 AM-12 PM: Enhancing and Accelerating your AI and Machine Learning solution through Intel Integrated Graphics

1 PM-2 PM: Using Variable Rate Shading to improve the user experience in real-time game engines

2:30 PM-3:30 PM: AnyFace: A solution for creating film industry quality facial rendering and animation using mainstream PCs.

4:30 PM-5:30 PM: Creators Meet Technology

1 August

9 AM-10 AM: Advanced SIMD programming with Intel ISPC

NVIDIA

Room 501A/B

28 July

2 PM-5:15 PM: Deep Learning for Content Creation and Real-Time Rendering

29 July

9 AM-12:15 PM: Special Topics and Latest Advances in Graphics for Film and Design

2-5 PM: GPU Ray Tracing for Film and Design

30 July

9 AM-12:15 PM: Real-Time Rendering – Technical Update

31 July

9 AM-10:30 AM: Latest Advances in Real-Time Ray Tracing

10:30 AM-12 PM: Advanced Real-Time Ray Tracing Tutorial

2 PM-5:15 PM: Ray Tracing Gems 1.1

PIXAR ANIMATION STUDIOS: RECRUITING

Room: 515A
29 July – 1 August
All day events

QUMULO

Room 511B/C
31 July, 2 PM-3 PM

SHOTGUN DEV DAY

Room 409A

29 July

9 AM-10:30 AM: Intro to Developing for Shotgun

11 AM-12:30 PM: Advanced Shotgun Development

2 PM-3 PM: Shotgun Developer Group

SUBSTANCE BY ADOBE: SUBSTANCE DAY AT SIGGRAPH

Room 409B
29 July, 10 AM-6 PM

TOBII AB: BETTER XR DEVICES WITH EYE TRACKING

Room 511B/C
30 July, 2 PM-3 PM

WALT DISNEY ANIMATION STUDIOS

Room 410

29 July

2 PM-5 PM: Women In Animation Summit

30 July

11 AM-5 PM: The Walt Disney Company Suite - Open Hours

31 July

9 AM-11 AM: Walt Disney Animation Studios Educator's Forum

1 PM-5 PM: The Walt Disney Company Suite - Open Hours

The Job Fair is the best place at SIGGRAPH 2019 for employers to meet with thousands of job seekers from around the globe!

Once again, Job Fair Exhibitors will be posting their jobs on the CreativeHeads.net and ACM SIGGRAPH job boards one month prior to the conference. This allows SIGGRAPH 2019 attendees to connect with employers before the conference, during the conference via the Job Fair, and after the conference via the CreativeHeads.net job board and candidate profiling system.

CreativeHeads.net provides the most comprehensive recruitment software solution for the VFX, animation, video game, TV, film, and 3D technology and software tools industries.

Employers

The Job Fair is **the best place to be** if you want to...

- Meet with seasoned professionals working in the creative industries.
- Find right-brain, left-brain, and hybrid talent!
- Promote your company, job openings, projects, and participation to millions of people via SIGGRAPH 2019 and the CreativeHeads.net Job Board.
- Reach an extremely diverse and experienced group of creative professionals working across multiple creative industries.

Job Seekers & Casula Networkers

The Job Fair is **the best place to be** if you are:

- Actively looking for a new job.
- Passively networking to see what opportunities are available.
- Interested in getting acquainted with some great companies.
- Hoping to broaden your horizons and possibly switch industries.
- Looking for career development tips.
- Wanting to learn about the latest CG and interactive techniques.

JOB FAIR PARTICIPANTS (AS OF 7 JUNE)

Activision

Animal Logic

Bungie

The Focus

FoxNext Games

Garmin International

Hi- Rez Studios

Ilion Animation Studios

Mikros Animation

The Mill

MPC Film

Mr. X

Oxide Games

Reel FX Animation Studios

Rodeo FX

Savannah College of Art and Design

Ubisoft Group

WB Games

Weta Digital

Zero VFX

Zoic Studios

ATTENDEE LOUNGE

Hang out, relax, and recharge (yourself and your devices). All registration levels welcome.

Hours
Sunday, 28 July, 8:30 AM-8 PM
Monday, 29 July, 8:30 AM-6 PM
Tuesday, 30 July, 8:30 AM-7:45 PM
Wednesday, 31 July, 8:30 AM-8 PM
Thursday, 1 August, 8:30 AM-5:35 PM

BOOKSTORE

BreakPoint Books offers books, CDs, and DVDs on computer animation, graphic design, gaming, 3D graphics, modeling, and digital artistry. The bookstore features recent books by SIGGRAPH 2019 speakers and award winners.

To suggest books, CDs, or DVDs that should be available in the bookstore, please contact Breakpoint Books at dhemsath83@gmail.com.

CHILD CARE

SIGGRAPH 2019 will offer high quality children's programming and services, provided by KiddieCorp. Inc., for children aged 6 months through 12 years old. There will be appropriate activities for each age group. A $5 non-refundable deposit is required at the time of the reservation.

The registration deadline is 26 July, 2019 at 12 PM Pacific Time. For hours of operation and to register, visit https://s2019.siggraph.org/attend/child-care/

CHILD POLICY

Registration Requirements

All children must register for the conference, regardless of age. Each paid adult may register up to three children, 12 and under at no charge. Children 13 and over will be required to purchase their registration.

Disclaimer
Please be aware that parts of the Conference may contain adult content, graphic images, or violence.

Attendance Restrictions

There are no age-based restrictions to attend at Conference. However, children 17 and under must be accompanied by a registered adult at all times.

Lost Children

Unattended and lost children are to be taken to the Conference Management Office (Room 304A) until parents/guardians can be located. Conference Management staff will notify SIGGRAPH security and instruct them to advise their staff with respect to the discovered child, as parents will probably approach Security personnel with inquiries.

GEEK BAR

Network in real-time, stream conference session content, or enjoy wireless access and comfy chairs. Only open for Full Conference Platinum and Full Conference attendees.

Hours
Sunday, 28 July, 8:30 AM-8 PM
Monday, 29 July, 8:30 AM-5:35 PM
Tuesday, 30 July, 8:30 AM-7:45 PM
Wednesday, 31 July, 8:30 AM-8 PM
Thursday, 1 August, 8:30 AM-5:35 PM

HOTEL RESERVATIONS

Visit the SIGGRAPH 2019 hotel page to access the easy-to-use online hotel reservation system, or contact SIGGRAPH 2019's Official Housing Partner:

onPeak
+1.855.416.6073 (Toll Free and Domestic)
+1.312.527.7300 (International)
siggraph@onPeak.com

onPeak is the only official hotel provider for SIGGRAPH 2019. Room rates or availability by any other company or representative cannot be guaranteed by SIGGRAPH 2019. While other hotel resellers may contact you offering hotel options, they are not endorsed by or affiliated with SIGGRAPH 2019, and entering into financial agreements with such companies may have costly consequences (such as, loss of deposit or payments, unintended cancellation of reservations or no reservations).

LOS ANGELES CONVENTION CENTER

1201 South Figueroa Street
Los Angeles, California 90015

Accessibility

The convention center is handicap accessible. If you have special needs or requirements, please contact Conference Management at: confadmin@siggraph.org

Food Services

A variety of food truck vendors and concessions are available throughout the convention center and outdoor plaza space.

Internet Access

Free wireless access is available during SIGGRAPH 2019 in all conference locations within the Los Angeles Convention Center (except in the Exhibit Hall).

Luggage and Coat Check

Luggage and Coat check services are available in the Image Quest Plus Business Center at the Los Angeles Convention Center throughout the conference week. There is a $5 fee for each item up to four hours and a $10 fee for each item dropped off for more than four hours. Late fees for items not picked up at the conclusion of the day will apply.

Nursing Mothers Room

The First Aid Station in South Hall Lobby has a private room reserved for breastfeeding mothers. There is also a nursing room in the First Aid Station in West Hall also. Both are available during the conference days.

PARKING

Use these links below to locate parking near or at the Los Angeles Convention Center:

Downtown Parking
LA LIVE Parking
Los Angeles Convention Center Parking

PHOTOGRAPHY AND RECORDING POLICIES

All registered media and attendees are encouraged to take photos and record video in approved areas at SIGGRAPH 2019. However, it is important to recognize that many of the words, images, sounds, objects, and technologies presented at SIGGRAPH are protected by copyrights or patents. Please respect their intellectual-property rights and do not photograph or shoot video in designated "No Photography" areas.

Photography and recording is prohibited in the Electronic Theater, Production Sessions and the VR Theater, and is at the discretion of presenters for the following programs: ACM SIGGRAPH Award Talks, Art Papers, Courses, Exhibition, Exhibitor Sessions, Panels, Talks and Technical Papers.

Cameras and Recording Devices

All attendee cameras and recording equipment must be hand-held. Members of the media are allowed to use tripods and larger equipment, but they must register their devices with the SIGGRAPH 2019 Media Office in advance of use.

Conference Photographers & Videographers

SIGGRAPH 2019 employs professional photographers and videographers and reserves the right to use all images and videos that these content creators document during the conference for publication and promotion of ACM SIGGRAPH events.

POWER STATIONS

There are three charging stations at SIGGRAPH 2019, one in the Concourse Hallway (between South Lobby and in front of the Business Center); one in the Compass Terrace (in front of the Compass Café) and one in the Petree Hall Corridor (in front of Hall A across from the Galaxy Café).

SPECIAL POLICIES

Computer Animation Festival Electronic Theater Access

To be admitted to the Computer Animation Festival Electronic Theater, you must have a ticket. A ticket is included with Full Conference Platinum and Full Conference registrations. Other levels will need to purchase a ticket separately. Please note: **There will be only one show this year, Monday, 29 July, 6:30 PM-8:35 PM**

Reception Access

To be admitted into the Reception, you must have a ticket. Your badge does not provide access.

Technical Materials and Merchandise

All SIGGRAPH 2019 technical materials and merchandise must be picked up at the conference at Merchandise Pickup. No refunds will be given for items that are not claimed at the conference, nor will unclaimed items be shipped after the conference.

REGISTRATION FEES AND CATEGORIES INFORMATION

For detailed information on the registration fees and registration categories that best fits your schedule and budget visit:

https://s2019.siggraph.org/attend/register/

One-Day Registration

Full Conference One-Day registration is available. It includes one-day admission to conference programs, events, and experiences as well as the Exhibition (Tuesday-Thursday). It does not include access to the Business Symposium, Electronic Theater or a Reception ticket.

Refund and Cancellation Deadlines

Cancellation requests for refunds must be made in writing and received on or before Friday, 5 July. No refunds will be issued after this date. There is a refund processing fee of $75. Experiences registrations are not refundable

Note:
Lost badges cannot be replaced. If you lose your badge, you must purchase a new registration.

SIGGRAPH 2019 Conference Chair

Mikki Rose
Blue Sky Studios

ACM SIGGRAPH Frontiers Talks Chair

MK Haley
Walt Disney Imagineering

Adaptive Technology Co-Chairs

Natalie Rountree
Dylan Moore

Art Gallery Chair

Brittany Ransom
California State University Long Beach

Art Papers Editor

Everardo Reyes
Université Paris 8

Attendee Experience Manager

Joshua Grow
Zorroa

Birds of a Feather Coordinator

Mark Elendt
SideFX Software

Business Symposium Chair

Adele Newton
University of Waterloo

Computer Animation Festival Director

Emily Hsu
Blizzard Entertainment

Courses Chair

Michael Reed
Blue Sky Studios

Creative Development Director

Munkhtsetseg Nandigjav
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Games Co-Chairs

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Laurent Delayen
Epic Games

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