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– Posters –

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Keynote

Liquid Content: an Exploration of the Future of Culture and Creativity

Matthieu Lorrain

Abstract

Imagine stories that shape-shift with every watch, creating a personal revolution for each viewer. Dive into the world of AI-powered storytelling that's turning culture on its head. In this talk, Matthieu will explore the concept of Liquid Content, where narratives break free from their confines, offering an endless canvas of creativity.

Biographical Note

Matthieu Lorrain is a creative and technology pioneer in the fields of digital experiences & content innovation. He is currently Creative Lead, AI & Creativity Research at Google DeepMind. He is also the co-founder of fAke Artists, a creative collective exploring the future of post-reality experiences. Matthieu Lorrain has a long history working with global brands and tech companies to invent new types of user engagement. He has been exploring creative applications of emerging technologies for the last 20 years: ranging from interactive video to connected objects, augmented reality, and artificial intelligence. His most recent work focuses on how generative AI can supercharge the creative experience. His past projects have received multiple accolades from global organizations including Emmy Awards, Cannes Lions (Gold), Clios (Gold), Webby's, Tribeca Film Festival, '#1 Product Hunt of the Day' and FWA. Matthieu is a guest lecturer at Columbia University, where he delivered the inaugural masterclass on AI & Filmmaking in 2024. He is also frequently invited as featured speaker at major conferences. He has previously spoken at Cannes Lions (3x), SXSW, Spike Asia, 4A's Createtech and the NYC Tech Forum. Born & raised in the French Alps, Matthieu has lived in Rio de Janeiro, Montreal and Paris before moving to New York City in 2011. He holds a Master's degree in Cultural Studies from Institut d'Etudes Politiques and another in Marketing & Communication from ESCP Paris Business School.

Keynote

Is Data the Only Lever for Designing Interactive Simulations?

Maud Marchal

Abstract

The design of interactive simulations has always been struggling on the trade-off between accuracy and computation time performances. These last years, the rise of data-driven approaches has paved the way for new models offering outstanding results for several use cases. Thus, if the use of data is nowadays commonly accepted for some scenarios, it often remains uncertain how, when or where data can outperform more conventional approaches for designing interactive simulations. In this talk, I will illustrate how we can combine data-driven and model-based approaches for designing interactive simulations within the context of robotics and virtual reality applications.

Biographical Note

Maud Marchal is a Full Professor in Computer Science at Univ. Rennes, INSA/IRISA in France. She is also a Junior Member of Institut Universitaire de France since 2018. She works on physics-based simulation since her PhD in 2006 at University Joseph Fourier, Grenoble. Since 2008 and her position at INSA, she has explored and contributed to novel Virtual Reality and robotics applications, gathering her expertise on haptic feedback, 3D interaction techniques and interactive physics-based simulations. She is involved in program committees of major conferences of computer graphics, virtual reality and haptics and Associate Editor of IEEE Transactions on Visualization and Computer Graphics, IEEE Transactions on Haptics, ACM Transactions on Applied Perception and Computers & Graphics. She has notably been Program Chair of IEEE Virtual Reality Conference in 2018, 2020 and 2021, Program Chair of IEEE Symposium on Mixed and Augmented Reality in 2021 and 2023 and General Chair of ACM SIGGRAPH/Eurographics Symposium on Computer Animation in 2018 and Eurohaptics in 2024.

Keynote

Expressive Facial Modeling and Animation

Karan Singh

Abstract

Humans are hard-wired to see and interpret minute facial detail. The rich signals we extract from facial expressions set high expectations for computer-generated facial imagery. This talk focuses on the science and art of expressive facial animation. Specifically, aspects of facial anatomy, biomechanics, linguistics and perceptual psychology will be used to motivate and describe the construction of geometric face rigs, and techniques for the animator-centric creation of emotion, expression and speech animation from input images, audio and video. In some measure the talk will reveal some of the technological innovations that enabled the design and creation of faces in games like Cyberpunk 2077 (Game of the year 2020), and films like Avatar: the way of water (Best VFX Oscar 2023).

Biographical Note

Karan Singh is a Professor of Computer Science at the University of Toronto. His research interests lie at the intersection of art, Computer Graphics (CG) and Human Computer Interaction (HCI): spanning interactive modeling and animation, visual perception, visualization and Augmented/Virtual Reality. Karan has been a research and development lead on the technical Oscar (2003) winning modeling and animation system Maya. He has co-founded multiple companies, most recently JALI Research. He was the R&D Director for the 2005 Oscar winning animated short film Ryan. His recent research in facial animation has been used on characters in AAA games like Cyberpunk 2077 and Call of Duty: Modern Warfare 2, and films like Avatar: the way of water (Best VFX Oscar 2023).