Real-Time Live! Fact Sheet

Chair: Matt Adcock, CSIRO, Australia
Co-Chair: Kann Ryan, SugarBolt Creative, South Korea
Program Schedule: Friday, 9 December, 4pm

Fast Facts

● Watch some of the most innovative interactive techniques as they are presented and deconstructed live by their creators during SIGGRAPH Asia's Real-Time Live! experience.

● Creators of cutting-edge real-time technologies and experiences will give you a look under the hood of their creations and share the techniques they use to achieve jaw-dropping results at SIGGRAPH Asia 2022's Real-Time Live!

● This year, Real-Time Live! presentations will be recorded during the live event and available on-demand afterwards.

Quote from Matt Adcock, SIGGRAPH Asia 2022 Real-Time Live! Chair:

"The Real-Time Live! program showcases some of the latest, most innovative, creative, futuristic and entertaining achievements in Computer Graphics and Interactive Techniques.
And it has all the risk and excitement of live on-sage demonstrations!"

SIGGRAPH Asia 2022 Real-Time Live! Program Highlights

● **Shader Park: Live-Coding Interactive & Procedural Shaders with JavaScript**
Torin Blankensmith & Peter Whidden, Shader Park LLC
Shader Park is a creative coding community and JavaScript library for creating interactive 2D and 3D shaders. It features a live-coding environment with documentation and community authoring. It is focused on code literacy and artistic experimentation by making computer graphics programming accessible for artists, designers, students, educators, and all.

● **Real-Time Technologies for Realistic Digital Humans: Facial Performance and Hair Simulation**
Mark Schoennagel, Unity Technologies
We rapidly edit the facial performance of the Enemies' protagonist in Maya with Ziva's control scheme and deploy the new performance to Unity instantaneously, as if reacting to director feedback live. We then switch the protagonist for a new character to show the extensibility of Ziva faces and animation data.

- **In Camera Visual Effects (ICVFX) Production**
  Koni Jung, Westworld
  We are going to show ICVFX using Unreal Engine, LED wall, and OptiTrack camera tracking system. We are going to show the process of moving background objects or changing time of day in real time during shooting.

- **Teleport to the Augmented Real-World with Live Interactive Effects (IFX)**
  Rose Barrett, Warren Butcher, Andrew Chalmers, Simon I Finnie, Weng Khuan Hoh, Taehyun Rhee & Richard Roberts, Victoria University of Wellington
  We present a novel live media technology for augmented telepresence and live interactive effects (IFX), allowing people from a distance to virtually teleport and interact in augmented real-environments. We introduce live capturing/modeling/blending, and interactive effects to augment telepresence. People at-a-distance can connect and communicate with creative storytelling, augmented by IFX.

Full information about this year's Real-Time Live! program can be found on
https://sa2022.siggraph.org/en/attend/real-time-live/

For the overall SIGGRAPH Asia 2022 program schedule, please visit
https://sa2022.siggraph.org/full-program/