Visualization for the Digital Transformation Era “VR Digital Platform”

Presented by:

FORUM 8
(Lead Sponsor)

Come join FORUM8 as we discuss our software solutions to create a VR digital platform for the creation and visualization of the cities of the DX-era. We will begin with an overview and demonstration of our flagship software VR-Design Studio UC-win/Road and then move on to a company overview. We will discuss our current activities and our plans for improving our software for the future. If you have an interest in Automatic Driving Systems, Drive Simulations, Infrastructure Design and Planning, or Civil Engineering Design then you can’t miss this presentation.

We will also discuss our various other software solutions like our 3DCG creation software Shade3D, and our made-in-Japan 3D game engine Chidori Game Engine!

We hope you can enjoy our presentation and be sure to prepare any questions for our live Q&A session on 11 December, Friday at 10AM SGT/GMT+8 (11AM JST. Click here to convert to your time zone).

Speaker(s):
- Mr. William Nelson, FORUM8 Co., Ltd.

Volumetric Capture Techniques & Applications

Presented by:

IO INDUSTRIES

Volumetric video capture is the ultimate tool for generating truly life-like 3-dimensional avatars of human performers, recording every nuance of their expressions, emotions, and the full performance they’re bringing to the stage – from all angles, simultaneously. The result is a vivid, engaging, virtual copy of the performer which can be replayed from any point of view, using either 2D or 3D display technologies.

Several different capture techniques and modalities are used today. Capture configurations vary primarily in the quantity and specifications of the precisely-synchronized video cameras installed around the capture stage. Ultimately, one or more persons then enter the stage and deliver a performance, a speech, a detailed training lesson, etc. The video from all cameras is then processed through 3D reconstruction software, resulting in an avatar of the performer – a solid, moving model which can be viewed freely from all angles.

At IO Industries, we develop market-leading specialty video cameras, designed with the needs of VR/AR/XR content generators in mind. Whether it’s a pair of cameras in a 3D stereoscopic rig, a handful of cameras for a
SIGGRAPH ASIA 2020 –
EXHIBITOR TALK SESSIONS (ON-DEMAND)

360° VR configuration, or an array of over 100+ cameras set up for volumetric video capture, IO Industries cameras have the features and flexibility it takes to make these configurations happen.

With this event, we will review, from a technical perspective, some of the capture techniques being used today, as well as recent use cases where volumetric capture has elevated the immersivity of real-world applications. We will also review some of the major players in this industry and how they contribute to the overall volumetric capture ecosystem today.

Our live Q&A session will be on 12 December, Saturday at 10AM SGT/GMT+8 (Click here to convert to your time zone).

Speaker(s):
- Mr. Todd Seath, IO Industries Inc.

Movie Magic & RenderMan 24

Presented by:

During this talk, learn where Pixar’s state-of-the-art rendering technology is headed in the upcoming version of RenderMan 24 … and learn how advancements in NPR (non-photorealistic rendering) are set to transform RenderMan into a tool for broad look development, delivering everything from photorealism to new kinds of Stylized Looks (toon, anime, illustrative, and painterly styles). Pixar’s Dylan Sisson will show examples of how these Stylized Looks can be created interactively, and how this offers new opportunities for storytellers. With artist friendly tools for Houdini, Katana, Maya ... and a new plugin for Blender on the way, you’ll want to check it out … see what RenderMan can do for you, and learn how you can try out the tools for free with Non-Commercial RenderMan.

Our live Q&A session will be on 10 December, Thursday at 10AM SGT/GMT+8 (Click here to convert to your time zone).

Speaker(s):
- Dylan Sisson, Pixar Animation Studios
The Khronos Group Open Standard Update: Vulkan, WebGL, ANARI, OpenXR, glTF and 3D Commerce

Presented by: The Khronos Group

The Khronos Group is an open standards, industry consortium focused on 3D graphics, virtual and augmented reality and parallel computation. This session will specifically focus on updates from the Vulkan, WebGL, ANARI, OpenXR, glTF and 3D Commerce efforts inside Khronos.

Our live Q&A session will be on 10 December, Thursday at 10.30AM SGT/GMT+8 (Click here to convert to your time zone).

Speaker(s):
- Mr. Neil Trevett, NVIDIA
- Mr. Ed Mackey, Analytical Graphics Inc.
- Mr. Shrenik Sadalgi, Wayfair
- Mr. Nathaniel Hunter, DreamView
- Dr. Brent E. Insko, Intel Corporation
- Mr. Tony Lin, HTC
- Mr. Kenneth Russell, Google
- Dr. Tom Olson, Arm Limited

How to optimize big mocap shoots and integrating your hardware ecosystem

Presented by: Xsens

This session will talk about the latest developments for motion capture. Ole Bakker and Steven Schurink from Xsens will talk about how to optimize big motion capture shoots and the possibility to capture body motion of an unlimited number of actors simultaneously, in an unlimited volume and in any location. Also how to enable deeper third-party hardware integrations and become a hub for the whole motion capture ecosystem. Other tracking devices can be managed from one interface. Ole and Steven will show the ease of use and accuracy of the latest generation of Xsens motion capture.

Our live Q&A session will be on 11 December, Friday at 10.30AM SGT/GMT+8 (Click here to convert to your time zone).

Speaker(s):
- Mr. Ole Bakker, mCube Inc
- Ms. Steven Schurink, mCube Inc