Dome3D Fulldome Production Training Outline

Instructor Information

Instructor: Matt Mascheri
Telephone: *630.660.8239*
E-mail: Matt@Dome3D.com
Skype: mattmascheri

Overview

This hands on training session will introduce participants to various fulldome content creation methods. CGI content creation, fulldome photography and live action capture will be explored. CGI scenes will be created in 3DS Max using Vray, fulldome images will be captured using DSLR cameras and all footage will be enhanced for the dome in Adobe After Effects. The option to shoot with a Freedom360 or GP185 kit may be arranged as well. This training session is meant to provide a solid foundation for fulldome production using in-house developed methods, best practices and industry standards. Basic knowledge of software packages and the fulldome medium are helpful but not required.

Objectives

By the end of this training session the participants will be able to:

- Understand the core concepts of fulldome content creation

- Learn to use and setup 3DS Max and Vray for fulldome CGI sequences

- Use the Vray dome camera and understand various Vray render settings

- Import content into Adobe After Effects and set up a fulldome composition

- Properly setup a DSLR and compose shots for fulldome photography

- Shoot HDR images and understand when it is appropriate to do so

- Understand the differences between shooting in RAW and Jpeg

- Process fisheye images for the dome via Adobe Bridge and Camera RAW

- Set up and shoot a fulldome time lapse sequence

- Import still images and sequences into Adobe After Effects

- Understand the work flow and concepts of fulldome live action capture

- Critique footage and understand primary issues facing fulldome projection

- Shoot fulldome live action sequences with a Freedom360 or GP185 Kit (optional)

Session Breakdown

3DS Max

- Overview of 3DS Max – Q&A session

- Begin with a basic fulldome 3DS Max scene

- Introduce Vray dome camera and work with with various Vray render settings

- Understand "sweet spot" and action areas.

- Introduction to Backburner and network rendering

- Network render a sample scene

After Effects

- Overview of Adobe After Effects – Q&A session

- Importing content and setting up a fulldome composition

- Preparing "off screen" information – frames, TRC, logo, title and placement

- Color correction / enhancements for the dome

- Learn how to render preview videos

- Prepare the watch folder and set up a network render

Still Fisheye Photography

- DSLR camera basics and theory for fulldome photography – Q&A session

- LDR vs HDR

- Camera accessories

- Adobe Bridge work flow

- Camera RAW settings and presets

- Camera RAW vs Photoshop

- Finishing for the dome in Photoshop

- Additional software options - Photomatix

Time Lapse Photography

- Set up a sample time lapse shoot

- Shooting RAW vs Jpeg

- Camera settings for time lapse

- Adobe Bridge work flow review

- Bringing stills and time lapse into Adobe After Effects

- Overview of enhancing footage in Adobe After Effects

Live Action (optional)

- Discuss live action capture - Q&A time

- Overview of the Freedom360 or GP185 fulldome camera kit.

- Import and prepare Freedom360 or GP185 Kit footage for the dome

Customer Requirements

- DSLR (Canon or Nikon) with circular fisheye lens

- Basic camera gear – tripod, intervalometer, batteries, memory cards

- System Adobe Suite CS5 or later – Photoshop, After Effects, Bridge pre-installed

- 3DS Max 2011 or later and Vray 1.5

- Access to fulldome system encoders and basic knowledge of dome settings

- Shooting locations pre-selected and permission to shoot at locations (if required)

- Internet connection

Gear Instructor will bring

- Nikon DSLR and all support gear

- Laptop with production software

Optional

- Live action cameras - Freedom360 or GP185 Kit

- Hourly post training support (remote via Skype)