SKSVFX8

Recreate and matchmove live action camera movements in 3D

Overview

This standard is about recreating the camera movements that were used to shoot the background plate. It involves working with basic line up geometry and associated scene data that have been captured on set in order to ensure a good match with the scene.

This standard is for those involved with matchmoving and 3D tracking and also covers the use of real-time tracking solutions.

This standard could be used by VFX Artists and VFX Junior Artists.

Performance criteria

You must be able to:

1. interpret information from background plates, floor sheets and camera data to identify matchmoving and 3d tracking requirements
2. calibrate each lens to identify and remove distortion
3. draw vectors to determine access planes within the plate
4. set up tracking scenes which comply with on-set camera data
5. utilise industry production tracking tools to interpret and track interacting factors on the project.
6. make sure tracking points stick to appropriate points on plates for the length of the shot
7. check for errors and refine as necessary
8. align camera solve to improve match-moving and 3D tracking
9. render the tracking sequence for review
10. share work with others according to production timelines and use feedback to revise tracking when required
11. convert plates into various formats for use with inhouse software
12. follow process for the planning, setup and calibration of real-time tracking solutions

Knowledge and understanding

You need to know and understand:

1. how and where to obtain up-to-date floor sheets and camera data
2. the differences between parallax, nodal, non-nodal and mixed motion camera movement and how parallax helps camera tracking software calculate an accurate track
3. how to use tracking software
4. real time tracking solutions
5. how to create and use distortion lens grids
6. the principles of line up geometry and how to use it for match moving and 3D tracking
7. how to measure and recreate focal length
8. how to identify and correct errors in tracking
9. how to render out geometry
10. the importance of working in line with production timelines and milestones

SKSVFX8

Recreate and matchmove live action camera movements in 3D

Developed by	ScreenSkills
Version Number	3
Date Approved	31 Mar 2024
Indicative Review Date	31 Mar 2027
Validity	Current
Status	Original
Originating Organisation	ScreenSkills
Original URN	SKSVFX8
Relevant Occupations	VFX Technical Director, VFX Artist, VFX Junior Artist, VFX Assistant Technical Director, VFX Producer, VFX Supervisor, VFX Assistant Supervisor
Suite	Visual Effects
Keywords	recreate; matchmove; camera; tracking; plates; camera data; lens; calibrate; 3D; VFX; visual effects;