

The HDR-video Pipeline

Jonas Unger, Francesco Banterle, Gabriel Eilertsen, and Rafał K. Mantiuk

Abstract

High dynamic range (HDR) video technology has gone through remarkable developments over the last few years; HDR-video cameras are being commercialized, new algorithms for color grading and tone mapping specifically designed for HDR-video have recently been proposed, and the first open source compression algorithms for HDR- video are becoming available. HDR-video represents a paradigm shift in imaging and computer graphics, which has and will continue to generate a range of both new research challenges and applications. This intermediate- level tutorial will give an in-depth overview of the full HDR-video pipeline present several examples of state-of- the-art algorithms and technology in HDR-video capture, tone mapping, compression and specific applications in computer graphics.
