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Titolo	Assessment of Visual Quality and Simulator Sickness for Omnidirectional Videos [[electronic resource] /] / by Ashutosh Singla
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Disciplina	006.8
Soggetti	Signal processing Telecommunication User interfaces (Computer systems) Human-computer interaction Computational intelligence Signal, Speech and Image Processing Communications Engineering, Networks User Interfaces and Human Computer Interaction Computational Intelligence
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Visual Quality Assessment of 360 -- State of the Art -- Technical Setup -- Comparison of Different Subjective Test Methods -- Visual Quality Assessment for 360 -- SSQ Assessment for 360 Videos -- Performance Analysis of SSQ -- Evaluation of Different Constructs -- Media Quality, Simulator Sickness and Presence -- Future Work -- Conclusion.
Sommario/riassunto	This book presents extensive research on the quality of 360° video perceived by users with HMDs. The book aims to develop a set of standard guidelines for the systematic visual quality assessment of 360° videos. Firstly, conventional subjective test methods such as Absolute Category Rating (ACR) and Double Stimulus Impairment Scale (DSIS) are applied to evaluate video quality, alongside the Modified ACR (M-ACR) method newly proposed. Building on the reliability and general applicability of the procedure across different tests, a methodological

framework for 360° video quality assessment is then presented. The author also analyzes simulator sickness to investigate the impact of different influencing factors. The insights gained on simulator sickness related to 360° video contribute to a better understanding of this particular use case of VR and can help to improve comfort among users by suggesting improvements in the technical specifications of 360° video and HMD technology and thus improving QoE. Presents extensive research on the quality of 360° video perceived by users with HMDs; Develops a set of standard guidelines for the systematic visual quality assessment of 360° videos; Analyzes simulator sickness to investigate the impact of different influencing factors.

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