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Introduction

Over the last decade, the Image Quality and System Performance (IQSP) conference has covered a wide range of topics relating to the evaluation of imaging system performance, the definition of the perceived image quality, and often the interrelationship between them. The perceived quality of images is of crucial importance in visual arts, as well as in commercial, scientific and entertaining application environments. Developments in display technologies, digital printing, imaging sensors, image processing, and 3D imaging are enabling new (or enhanced) possibilities for creating and conveying visual content that informs or entertains. Wireless networks and mobile devices expand the ways to share imagery.

Following the tradition of the 10 previous IQSP volumes, this volume includes research brought by industrial and academic engineers and scientists who strive to understand how humans judge images, how to quantify image quality, what makes high-quality imagery, and how to assess the requirements and performance of modern imaging systems. It comprises peer-reviewed contributions that cover research and applications throughout the imaging chain on: the methodologies and standards for quantifying perceptual quality and imaging performance; the evaluation of captured, compressed, displayed and print quality; objective and subjective video quality evaluation; and 3D image quality.

We hope Image Quality and System Performance XII is a useful reference to all those interested in present-day research on image quality and imaging-system performance.

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