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Introduction

Optical imaging and processing technology are widely applied in scenarios from remote sensing telescope, to medical microscope; from military surveillance to common mobile devices. Any development of optical imaging and processing is promoted by researchers from divergent fields like physics, mathematics, signal processing, etc. OIT'2015—Optical-electronic Imaging and Processing Technology conference is a well-organized platform for gathering researchers with different backgrounds, sharing their ideas, and inspiring new creations.

For this conference, we received more than 80 manuscripts. After serious peer review of every submission, we accepted 61 papers, 30 for oral presentation and 31 for poster. The papers cover a wide range in novel imaging techniques including multi-spectrum imaging, infrared thermal imaging, ultrasonic endoscopic imaging, etc. You may find how to use the fantastic theory like compressive sensing to improve the current imaging system. The papers also cover divergent image processing techniques and system calibration, including quality assessment, image super-resolution, enhancement, pattern recognition, artificial intelligence, and their military, medical, industrial, and consumer electronic applications. You will not only find theoretical improvements in these fields, but also elegant ideas such as the use of optical imaging and processing techniques to aid in surgery or weapon control. By all accounts, we think that this conference was very impressive and successful. We would like to take this opportunity to thank all participants for their great contributions.

Guangming Shi
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