

Digital Photography VII

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Editors

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Introduction

Welcome to the proceedings of the 7th annual Digital Photography Conference that takes place on January 24–25, 2011. The conference is part of the 2011 IS&T/SPIE Electronic Imaging: Science and Technology Symposium, held at the Hyatt Regency Hotel, San Francisco Airport, California, United States. This proceedings volume contains the technical papers in support of the presentations at the conference.

Willard S. Boyle and George E. Smith were awarded the Nobel Prize in Physics in 2009 for the invention of the first successful imaging technology using a digital sensor, a CCD (Charge-Coupled Device) in 1969 while working at Bell Laboratories. The CCD as the digital camera's electronic eye revolutionized photography. Since the pioneering work by Boyle and Smith, digital photography has enjoyed technology advancement and incredible commercial success with new exciting developments and technological challenges in the horizon. The Digital Photography Conference brings together a compilation of the latest development in the field of digital photography by researchers and engineers working in the imaging field.

This volume starts with an invited paper that gives a summary of high dynamic range image sensor architectures by Boyd Fowler. The technical contributions comprise articles about recent progress on digital photography and all its relevant areas, from optics, sensors, processing and reproduction, including advanced applications such as spectral imaging and computational photography.

The Digital Photography Conference has successfully used a peer-review process to select papers for the proceedings. This process ensures quality of the published articles: giving constructive feedback on author's submissions for writing the final manuscript. A single-blind review process was conducted for submitted papers and each submission had at least 4 reviews with an average of 5 reviews per submission. This year we also have two joints sessions with the Conference on Image Quality and System Performance VIII on Image Quality in Digital Photography and High Dynamic Range Imaging.

Thanks to the generous support from our sponsors last year, we started offering two prizes in recognition of outstanding work selected in the proceedings. Based on the very positive feedback we received thereafter, we decided to continue offering these two prizes in this year's Digital Photography VII conference as well. Both awards will be selected by the chairs and program committee and announced during the conference:

- Best Paper – sponsored by Fairchild Imaging
- Best Student Paper – sponsored by Canon U.S.A., Inc.

The conference activities do not stop at the end of the January meeting. The Digital Photography Conference provides a LinkedIn group entitled "Digital Photography Conference (IS&T/SPIE Electronic Imaging Symposium)" that has the objective to create a community to share ideas and post announcements relevant to digital photography. You are encouraged to join this LinkedIn group. Also, if you are interested in participating in the organization of this conference, please contact any of the chairs.

The 2011 Digital Photography Conference at the Electronic Imaging Symposium continues a tradition of presenting the latest knowledge and technologies relevant to digital photography and we are going to continue exploring new endeavors in this field for future editions of this conference.

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