

Digital Photography VI

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Editors

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1 Future of Digital Photography

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Introduction

Welcome to the proceedings of the sixth annual Digital Photography conference that takes place on January 18–19, 2010. The conference is part of the 2010 IS&T/SPIE Electronic Imaging symposium, held at the San Jose Marriott and at the San Jose McEnery Convention Center, San Jose, 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 prospects and emerging functions expected in the future of photography by Ricardo J. Motta. The technical contributions comprise articles about recent progress on digital photography and all its relevant areas: from capture, processing and reproduction, including image quality aspects such as noise, color, texture, dynamic range, depth of field and advanced applications such as computational photography.

The Digital Photography conference has successfully used a peer-review process in order to select papers for the proceedings. This peer-review process ensures quality of the published articles; giving constructive feedback on authors' 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.

Digital Photography VI is, for the first time, offering two prizes to be selected by the chairs and program committee:

- Best Paper: sponsored by Fairchild Imaging, Inc.
- Best Student Paper: sponsored by Canon Development Americas, 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. If you are interested, we encourage you to join this group. Also, if you are interested in participating in the organization of this conference, please contact the chairs.

The 2010 Digital Photography conference at the IS&T/SPIE 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.

Francisco Imai
Nitin Sampat
Feng Xiao