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Renu Rameshan · Chetan Arora Sumantra Dutta Roy (Eds.)

Computer Vision, Pattern Recognition, Image Processing, and Graphics

6th National Conference, NCVPRIPG 2017 Mandi, India, December 16–19, 2017 Revised Selected Papers



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Preface

The 6th National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG 2017) was held at Mandi, Himachal Pradesh, during December 16–19, 2017. NCVPRIPG 2017 was organized by the Indian Institute of Technology Mandi in association with the Indian Unit for Pattern Recognition and Artificial Intelligence (IUPRAI). The NCVPRIPG series of conferences aims to bring together researchers and practitioners from the allied areas of computer vision, graphics, image processing, and pattern recognition, in order to promote community-wide discussions of ideas that will influence and foster continued research in the field. Over the years the conference has grown into a vibrant national conference with participations from many students and researchers in the field.

These proceedings contain the papers accepted and presented at the conference (including those presented in the oral as well as poster sessions). The papers showcased original contemporary research spanning various broad themes such as video processing, image and signal processing, segmentation, retrieval, captioning, and various pattern recognition applications. Out of a total of 147 papers submitted to the conference, 48 were accepted and presented, following an elaborate double-blind review process. After the review process, the final decision process was carried out by the Program Chairs based on the review comments. The conference involved eight oral sessions with a total of 25 papers presented, and two poster sessions containing a total of 23 papers. The papers in the proceedings are the revised versions which were submitted after incorporating the review comments.

The conference hosted plenary talks by Dr. Guna Seetharaman (Naval Reseach Lab, United States), Dr. Nikhil Rasiwasia (Amazon), and Dr Siddhartha Chaudhuri (Adobe Research and IIT Bombay) Prof A. N. Rajagopalan from IIT Madras was the general chair. There were also sessions by industry and special sessions covering topics on virtual reality and rolling shutter cameras. Two research challenges were also held in connection with NCVPRIPG 2017: to automatically detect auto-rickshaws in an image, and the second to automatically detect birds in an image. The conference was sponsored by Mathworks, Kovid Labs, Vehant Technologies, Punjab National Bank, and IIT Mandi.

March 2018

Renu Rameshan Chetan Arora Sumantra Dutta Roy

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