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Introduction

Welcome to MIPPR 2011, the Seventh Symposium on Multispectral Image Processing and Pattern Recognition which took place in the beautiful city of Guilin, China, at the banks of the Li River. A popular Chinese saying is that Guilin's scenery is best among all under heaven. We hope that the participants of the symposium were not only hard working at the conference, but also found time to see some of the natural sites.

The MIPPR symposium has a broad charter. Multispectral is interpreted not just multiple-wavelength in a narrow sense, but also multi-sensor, multi-modal and multimedia. 'Multispectral' covers many disciplines such as sensing, image processing, computer vision, pattern recognition, and involves the development of efficient processing algorithms and their optimization and implementation. The wide range of applications considered in this symposium includes automatic target recognition, autonomous navigation, medical image processing, remote sensing, geographic information systems, biometrics, and many others.

The MIPPR symposium provided a forum for scientists and engineers from universities and government laboratories to meet and exchange ideas. We expect that there were ample discussions both inside and outside the lecture halls, and that MIPPR 2011 was viewed as an exciting meeting.

In response to the Call for Papers, we received 430 submissions. Based on the reviews provided by an excellent program committee we accepted 294 papers covering many aspects of multispectral image processing and pattern recognition. The symposium consists of 5 proceedings volumes:

- MIPPR 2011: Multispectral Image Acquisition, Processing, and Analysis (SPIE Volume 8002)
- MIPPR 2011: Automatic Target Recognition and Image Analysis (SPIE Volume 8003)
- MIPPR 2011: Pattern Recognition and Computer Vision (SPIE Volume 8004)
- MIPPR 2011: Parallel Processing of Images and Optimization and Medical Imaging Processing (SPIE Volume 8005)
- MIPPR 2011: Remote Sensing Image Processing, Geographic Information Systems, and Other Applications (SPIE Volume 8006).

The realization of a conference depends upon the hard work of many dedicated people. We thank all the members of the organizing committee for putting together this Symposium for the benefit of all the researchers, and for making this conference a success. We hope the papers and the research results presented at

 $\,$ MIPPR 2011 will inspire new research in all the areas related to multispectral image processing and pattern recognition.

Bir Bhanu