Preface

The pervasive use of camera phones and hand-held digital cameras has led the community to identify document analysis and recognition of digital camera images as a promising and growing sub-field. Constraints imposed by the memory, processing speed and image quality of these devices are leading to new interesting problems to be addressed.

Following the success of the first CBDAR2005 workshop in Seoul, Korea, 2007 Workshop on Camera Based Document Analysis and Recognition (CBDAR) is being held in conjunction with the International Conference on Document Analysis and Recognition (ICDAR) in Curitiba, Brazil. The goal is to bring together researchers to present cutting edge applications and techniques and contribute to discussions on future research directions.

This proceedings contains a written archive of the papers to be presented. This year, we had 21 full paper submissions, from which 7 were accepted for oral presentation. They fall into three general areas of research – text detection, document retrieval and dewarping. In addition, 12 posters will be presented on various algorithms and applications, and 11 organizations will participate in the demonstration session. Each presenter was invited to present a full paper describing their contribution, and they are contained in the proceedings.

This year, Prof. Thomas Breuel and Mr. Faisal Shafait from the University of Kaiserslautern are organizing a page dewarping contest. One of the major research challenges in camera-captured document analysis is to deal with the page curl and perspective distortions. Current OCR systems do not expect these types of artifacts, and have poor performance when applied directly to camera-captured documents. The goal of page dewarping is to flatten a camera captured document such that it becomes readable by current OCR systems. Page dewarping has triggered a lot of interest in the scientific community over the last few years and many approaches have been proposed, yet, until now, there has been no comparative evaluation of different dewarping techniques. Results from the contest will be presented during the workshop.

Finally, we would like to sincerely thank those who are helping to ensure this workshop is a success. The ICDAR organizing committee – Prof. Robert Sabourin (Co-Chair), Prof. Kazuhiko Yamamoto (Workshop Chair), and Dr. Luiz Oliveira (Conference Manager) have been extremely helpful in making sure the workshop venue and scheduling were prepared. Prof. Masakazu Iwamura for the logo design, maintenance of web pages and mailing lists, and the preparation of the proceedings. The CBDAR program committee for reviewing and commenting on all of the submission we received. And the financial sponsors of the workshop: Applied Media Analysis, APOLLO, Hitachi, NEC, Osaka Prefecture University, Ricoh, and the University of Maryland. We thank you all.

We sincerely hope that you enjoy the workshop and that these proceedings provide an archival snapshot of this cutting edge research.

CBDAR2007 Co-Chairs

Koichi Kise and David Doermann