UNIVERSITY OF MACAU
FACULTY OF SCIENCE AND TECHNOLOGY
DEPARTMENT of
COMPUTER AND INFORMATION SCIENCE

"*Multiple Layer Text Detection from Born-Digital images*"

by
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Abstract

In this talk, a new framework for detecting text from webpage and email images is presented. The original image is split into multiple layer images based on the maximum gradient difference (MGD) values. Connected component processing and text detection are performed in each layer of images. A novel texture descriptor named as T-LBP, is proposed to further filter out non-text candidates with a trained SVM classifier. The ICDAR 2011 born-digital image dataset is used to evaluate and demonstrate the performance of the proposed algorithm. Following the same performance evaluation criteria, the proposed method outperforms the winner algorithm of the ICDAR 2011 Robust Reading Competition Challenge 1.

Biography

Professor Xiangjian He, as a Chief Investigator has received various national Research Grants awarded by Australian Research Council (ARC). He is a Professor of Computer Science in School of Computing and Communications and a Director of Computer Vision and Recognition Laboratory at the University of Technology, Sydney (UTS). He is an IEEE Senior Member. He has been awarded 'Internationally Registered Technology Specialist' by International Technology Institute (ITI). He has been carrying out research mainly in the areas of image processing, network security, pattern recognition and computer vision in the previous years. He is a leading researcher for image processing based on hexagonal structure. He has played a chairman role in various international conferences including IEEE CIT, IEEE AVSS and ICARCV. He is a guest editor for various international journals such as Journal of Computer Networks and Computer Applications (Elsevier), and in the editorial boards of various international journals. He is a supervisor of postdoctoral research fellows and PhD students. Since 1985, he has been an academic, a visiting professor, an adjunct professor, a postdoctoral researcher or a senior researcher in various universities/institutions including Xiamen University, China, University of New England, Australia, University of Georgia, USA, Electronic and Telecommunication Research Institute (ETRI) of Korea, University of Aizu, Japan, Hongkong Polytechnic University, and University of Macau.

ALL ARE WELCOME!