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Background

Chang-Tsun Li received the B.E. degree in electrical engineering from Chung-Cheng Institute of Technology (CCIT), National Defense University, Taiwan, in 1987, the M.S. degree in computer science from U.S. Naval Postgraduate School, USA, in 1992, and the Ph.D. degree in computer science from the University of Warwick, UK, in 1998. He was an associate professor of the Department of Electrical Engineering at CCIT during 1998-2002 and a visiting professor of the Department of Computer Science at U.S. Naval Postgraduate School in the second half of 2001. He is currently a professor of the Department of Computer Science at the University of Warwick, UK. He was Editor-in-Chief of the International Journal of Digital Crime and Forensics (2009 ? 2013) and is currently Associate Editor of the EURASIP Journal of Image and Video Processing (JIVP), Associate Editor-in-Chief of International Journal of Biometrics and Bioinformatics (IJBB) and Associate of Editor of Human-centric Computing and Information Sciences (HCIS). He has involved in the organization of a number of international conferences and workshops and also served as member of the international program committees for several international conferences. He is also the coordinator of the international joint project entitled Digital Image and Video Forensics funded through the Marie Curie Industry-Academia Partnerships and Pathways (IAPP) under the EU's Seventh Framework Programme (FP7) from June 2010 to May 2014. His research interests include digital forensics, biometrics, multimedia security, bioinformatics, computer vision, image processing, pattern recognition, evolutionary computation, machine learning and contentbased image retrieval.

Citation Index: 1480

Publication List (with citations from Google scholar) [CITATION]

<u>Trademark image retrieval using synthetic features for describing global shape and interior structure</u>

CH Wei, Y Li, WY Chau, CT Li - Pattern Recognition, 2009 - Elsevier

A trademark image retrieval (TIR) system is proposed in this work to deal with the vast number of trademark images in the trademark registration system. The proposed approach commences with the extraction of edges using the Canny edge detector, performs a shape ... Cited by 114

Source camera identification using enhanced sensor pattern noise CT Li - Information Forensics and Security, IEEE Transactions ..., 2010 - ieeexplore.ieee.org Abstract—Sensor pattern noises (SPNs), extracted from digital images to serve as the fingerprints of imaging devices, have been proved as an effective way for digital device identification. However, as we demonstrate in this work, the limitation of the current ... Cited by 112

A class of discrete multiresolution random fields and its application to image segmentation

R Wilson, <u>CT Li</u> - Pattern Analysis and Machine Intelligence, ..., 2003 - ieeexplore.ieee.org Abstract—In this paper, a class of Random Field model, defined on a multiresolution array is used in the segmentation of gray level and textured images. The novel feature of one form of the model is that it is able to segment images containing unknown numbers of regions, ... <u>Cited by 88</u>

<u>Semi-fragile watermarking scheme for authentication of JPEG images</u> CK Ho, <u>CT Li</u> - ... and Computing, 2004. Proceedings. ITCC 2004. ..., 2004 - ieeexplore.ieee.org

Abstract With the increasing popularity of JPEG images, a need arises to devise effective watermarking techniques which consider JPEG compression as an acceptable manipulation. In this paper, we present a semi-fragile watermarking scheme which ... Cited by 80

<u>Image authentication and integrity verification via content-based</u> watermarks and a public key cryptosystem

CT Li, DC Lou, TH Chen - Image Processing, 2000. ..., 2000 - ieeexplore.ieee.org ABSTRACT A technique using the inherent feature map of the underlying image as the watermark is proposed in this work. First, the binary feature map is extracted as watermark and partitioned into blocks. Secondly, neighboring feature map block are blended and ... Cited by 58

Oblivious fragile watermarking scheme for image authentication

CT Li, FM Yang, CS Lee - Acoustics, Speech, and Signal ..., 2002 - ieeexplore.ieee.org ABSTRACT An efficient. fragile watermarking scheme intended for image authentication and integrity verification is proposed in this work. To watermark the underlying image, the gray scale of each pixel is adjusted by an imperceptible quantity according to the consistency ... Cited by 45

A contrast-sensitive reversible visible image watermarking technique Y Yang, X Sun, H Yang, CT Li... - Circuits and Systems for ..., 2009 - ieeexplore.ieee.org Abstract—A reversible (also called lossless, distortion-free, or invertible) visible watermarking scheme is proposed to satisfy the applications, in which the visible watermark is expected to combat copyright piracy but can be removed to losslessly recover the ... Cited by 57

Wavelet-based fragile watermarking scheme for image authentication

CT Li, H Si - Journal of Electronic Imaging, 2007 - electronicimaging.spiedigitallibrary. ... Abstract. We propose a fragile watermarking scheme in the wavelet transform domain that is sensitive to all kinds of manipulations and has the ability to localize the tampered regions. To achieve high transparency (ie, low embedding distortion) while providing protection to ... Cited by 43

One-dimensional neighborhood forming strategy for fragile watermarking

CT Li, FM Yang - Journal of Electronic Imaging, 2003 - electronicimaging.spiedigitallibrary. ... Abstract. It is recognized that block-wise dependence is a key requirement for fragile watermarking schemes to thwart vector quantization attack. It has also been proved that dependence with deterministic or limited context is susceptible to transplantation attack or ... Cited by 38

A content-based approach to medical image database retrieval CH Wei, CT Li, R Wilson - Database Modeling for Industrial Data ..., 2005 - books.google.com

Abstract Content-based image retrieval (CBIR) makes use of image features, such as color and texture, to index images with minimal human intervention. Content-based image retrieval can be used to locate medical images in large databases. This chapter ... Cited by 32