

International Journal on Recent Researches In Science, Engineering & Technology

(Division of Electronics and Communication Engineering) A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy. It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in JIR. DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

Chief Editor : Dr. M.Narayana Rao, Ph.D., Rtd. Professor, NIT, Trichy.

Multimedia Security Spoofing of Digital Image Forensics – 3D Face Masks

M.LINGESH KUMHAR¹, S.JOSHIBHAPONMALAR² ¹P. G. Scholar, ²Assistant Professor ¹Anna University, ^{1,2}Saveetha Engineering College, Thandalam, INDIA. Email:¹lingeshkumhar@gmail.com,²joshibhaponmalar@saveetha.ac.in

Abstract: This paper proposes an advanced image processing algorithm for the investigation of multimedia security spoofing of an image. Multimedia Security spoofing is the act of masquerading as a valid user by falsifying data to gain an illegitimate access. The proposed algorithm provides a better solution for multimedia security spoofing by identifying the spoofed image which is a tampered or modified one. The algorithm is capable of processing all spoofed images in the form of 2D, video, 3D face mask and morphed pixel locations of falsified image. The algorithm proposed is OCLBP (Opposite Color Local Binary Pattern), LTP (Local ternary patterns) of texture based countermeasures using 2D data. The OCLBP tests the relation between pixel and it's neighbors and encode this relation into a binary word. This allows for identification of patterns/features of the pixel and its neighborhood belonging to different colors, thus resulting in Opposite Color relations. This Opposite color patten is proposed to identify inter color pattern relation and capable of achieving much richer feature space for detection of 3D and 2D images in image forensics. This is further classified using SVM (Support Vector Machine) classifier.

ISSN (Print) : 2347-6729 ISSN (Online) : 2348-3105 Volume 3, Issue 4, April 2015. JIR IF : 2.54 **DIIF IF : 1.46** SJIF IF : 1.329