

SCUOLA DI INGEGNERIA Corso di Laurea Magistrale in Ingegneria Informatica

Illuminant inconsistencies based methods for image splicing detection

Lorenzo Cioni

Anno Accademico 2015/2016

Introduction

Digital images are easy to manipulate thanks to the availability of the **powerful editing software** and **sophisticated digital cameras**.

The development of methods for verifying **image authenticity** is a real need in forensics.

Purpose: to detect image splicing aimed at *deceiving* the viewer.



Riferimenti bibliografici

- [1] I. Amerini, R. Caldelli, P. Crescenzi, A. D. Mastio, and A. Marino. Blind image clustering based on the normalized cuts criterion for camera identification. Signal Processing: Image Communication, 29(8):831 843, 2014.
- [2] I. Daubechies. Ten Lectures on Wavelets. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 1992.
- [3] M. Goljan, M. Chen, P. Comesana, and J. Fridrich. Effect of compression on sensor-fingerprint based camera identification. Electronic Imaging, 2016(8):1–10, 2016.
- [4] H. Muammar. Source camera identification using image sensor prnu pattern. Department of Electrical and Electronic Engineering, Imperial College, London.