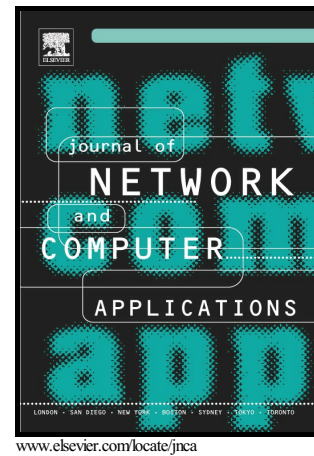


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Copy-Move Forgery Detection: Survey, Challenges and Future Directions

Nor Bakiah Abd Warif¹, Ainuddin Wahid Abdul Wahab¹, Mohd Yamani Idna Idris¹, Roziana Ramli¹,
Rosli Salleh¹, Shahaboddin Shamshirband¹, Kim-Kwang Raymond Choo^{2,3}

¹Department of Computer System and Technology, Faculty of Computer Science & Information
Technology, University of Malaya, 50603 Kuala Lumpur

²School of Information Technology & Mathematical Sciences, University of South Australia, Adelaide,
SA 5001, Australia

³School of Computer Science, China University of Geosciences, Wuhan 430074, China

nurbaqiyah@siswa.um.edu.my

ainuddin@um.edu.my

yamani@um.edu.my

roziana.ramli@gmail.com

rosli_salleh@um.edu.my

shamshirband@um.edu.my

raymond.choo@fulbrightmail.org

Abstract

The authenticity and reliability of digital images are increasingly important due to the ease in modifying such images. Thus, the capability to identify image manipulation is a current research focus, and a key domain in digital image authentication is Copy-Move Forgery Detection (CMFD). Copy-move forgery is the process of copying and pasting from one region to another location within the same image. In this paper, we survey the recent developments in CMFD, and describe the entire CMFD process involved. Specifically, we characterize the common CMFD workflow of feature extraction and matching process using block or keypoint-based approaches. Instead of listing the datasets and validations used in the literature, we also categorize the types of copied regions. Finally, we also outline a number of future research directions.

Graphical abstract

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