# Chapter 1 Introduction to Cross-Media Authentication and Verification

#### **ABSTRACT**

The current chapter provides an overview of the objectives being covered in this book, introducing the reader to the values of cross-media authentication in journalism and generally in informing services. Misinformation has social and economic consequences in every aspect of human activity, with critical political implication. The dominance of cross-media publishing and storytelling and the contemporary forms of digital journalism have shaped a new media landscape, raising certain question regarding the applied authentication and verification strategies. While media veracity has received a lot of attention during the last years, content verification practices need to be further supported, adapting to the diverse character of multiple media and sources. The utmost goal of this introductory chapter is to unveil the potentials of an interdisciplinary exploitation of current advantages in multichannel storytelling and their integration in cross-media veracity strategies, where best practices can be combined with state-of-the-art computational technologies and algorithmic solutions.

DOI: 10.4018/978-1-5225-5592-6.ch001

#### INTRODUCTION

During the last decades, we have witnessed the digitization of media production that followed the tremendous evolution of Information and Communication Technologies (ICTs) and their widespread adoption in the media business. Undoubtedly, this breakthrough has multi-laterally influenced the roles of journalists, communication professionals and media organizations, as well as their relationships with the end-users and the audience (Kalliris & Dimoulas, 2009). New tools and capabilities have been precipitated, transforming the media landscape with remarkably expeditious research progress, which is still in process. Among others, social media, web and generally ICT services have affected the ways that users are engaged in informing and mass communicating scenarios, where all news /content producing, accessing / browsing and "consuming" services co-exist (Dimoulas & Symeonidis, 2015; Katsaounidou & Dimoulas, 2018; Kotsakis, Kalliris, & Dimoulas, 2012; Spyridou, Matsiola, Veglis, Kalliris, & Dimoulas, 2013; Veglis, Dimoulas, & Kalliris, 2016). The vast expansion in the usage and the capabilities of contemporary mobile devices (i.e. smartphones and tablets) have fueled the materialization of the "information at my finger tip" vision, further advancing flexibility and mobility of both users and services, which can now be launched independently of time and space (Dimoulas, Veglis, & Kalliris, 2014, 2015, 2018; Satyanarayanan, Bahl, Caceres, & Davies, 2009). The proliferation of user-friendly (mobile) multimedia capturing and processing tools have extended the potentials of searching and sharing information, allowing regular users to produce and edit content online, with almost no expense. Hence, the so-called User Generated Content (UGC) has overwhelmed the Internet and social networks, usually having the form of multimodal entities (text, image, audio, video, etc.), which can be combined and propagated in innumerous ways (Dimoulas & Symeonidis, 2015; Dimoulas et al., 2014, 2015, 2018; Katsaounidou & Dimoulas, 2018; Kotsakis et al., 2012; Matsiola, Dimoulas, Kalliris, & Veglis, 2015; Veglis et al., 2016).

Except for the benefits that ICTs and digital revolution have offered to the media industry, there are certain arising issues related to the validity and integrity of the multimodal information that is exchanged through the available media channels. Hence, part of the posted, shared and/or republished information may be opinionated, sensationalized, misleading, unverified, manipulated or otherwise unreliable. Misinformation has social and economic consequences in all areas of human activity, with serious and,

## 15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/introduction-to-cross-mediaauthentication-and-verification/207998

#### Related Content

#### Discrete Transform Based Image Fusion: A Review

Umesh Kumar, Neha Gopaliya, Uma Sharmaand Sandeep Gupta (2017). *International Journal of Multimedia Data Engineering and Management (pp. 43-49).* www.irma-international.org/article/discrete-transform-based-image-fusion/178933

#### **Engineering Mobile Group Decision Support**

Reinhard Kronsteiner (2009). *Handbook of Research on Mobile Multimedia, Second Edition (pp. 51-65).* 

www.irma-international.org/chapter/engineering-mobile-group-decision-support/20994

#### Emoticon Recommendation System to Richen Your Online Communication

Yuki Urabe, Rafal Rzepkaand Kenji Araki (2014). *International Journal of Multimedia Data Engineering and Management (pp. 14-33).* 

 $\frac{\text{www.irma-international.org/article/emoticon-recommendation-system-to-richen-your-online-communication/109076}$ 

### A Survey of Web-Usage Mining: Techniques for Building Web-Based Adaptive Hypermedia Systems

Martha Koutri, Nikolaos Avourisand Sophia Daskalaki (2005). *Adaptable and Adaptive Hypermedia Systems (pp. 125-149).* 

www.irma-international.org/chapter/survey-web-usage-mining/4182

#### An Evaluation of Color Sorting for Image Browsing

Klaus Schoeffmannand David Ahlström (2012). *International Journal of Multimedia Data Engineering and Management (pp. 49-62).* 

www.irma-international.org/article/evaluation-color-sorting-image-browsing/64631