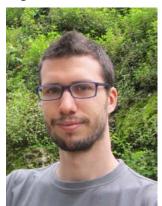**Special Session 15: New challenges in video PRNU**

A problem deeply investigated by the multimedia forensics community consists in detecting which device has been used to capture a visual content. This enables to trace down the owner of a video sequence, which proves extremely helpful to solve copyright infringement cases as well as to fight distribution of illicit material. The most powerful methods for device identification rely on the camera photo-response non uniformity (PRNU). Indeed, due to inhomogeneities in silicon wafers, a deterministic multiplicative noise component can be observed in all images or videos acquired by the same device. The goal of this special session is to stimulate the multimedia forensics community toward the development of novel approaches for video source attribution exploiting PRNU. As a matter of fact, videos typically suffer from more aggressive compression with respect to images. Moreover, videos acquired with smartphones and other modern devices almost always undergo some onboard postprocessing operations (e.g., motion stabilization). Additionally, as PRNU analysis is often carried out on a frame-by-frame basis, also the development of fast PRNU extraction tools is becoming an urgent necessity. For these reasons, new PRNU-based methods must be developed to make video source attribution robust in a modern real-world scenario.

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