

## Ontologies for Social Media Digital Evidence

**Authors :** Edlira Kalemi, Sule Yildirim-Yayilgan

**Abstract :** Online Social Networks (OSNs) are nowadays being used widely and intensively for crime investigation and prevention activities. As they provide a lot of information they are used by the law enforcement and intelligence. An extensive review on existing solutions and models for collecting intelligence from this source of information and making use of it for solving crimes has been presented in this article. The main focus is on smart solutions and models where ontologies have been used as the main approach for representing criminal domain knowledge. A framework for a prototype ontology named SC-Ont will be described. This defines terms of the criminal domain ontology and the relations between them. The terms and the relations are extracted during both this review and the discussions carried out with domain experts. The development of SC-Ont is still ongoing work, where in this paper, we report mainly on the motivation for using smart ontology models and the possible benefits of using them for solving crimes.

**Keywords :** criminal digital evidence, social media, ontologies, reasoning

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