Text Mining as a Tool in Repressive and Preventive Investigation Process

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The analysis of digital texts is a regular task in many areas of criminal investigations. The quantity, heterogeneity and above all the special characteristics of forensic texts make the investigation, even for experts, elaborate and difficult. The analysis of chats, forums and social networks are further areas from which the modern investigator can obtain information that is suitable for criminal investigation on the one hand and for assessing the potential danger posed by groups or organizations that are prepared to use violence on the other. Automation of these processes is only possible in the face of the amount of information and information sources inevitably Current approaches are mainly isolated solutions, which take into account the special characteristics of this type of of texts only insufficiently. With MoNA, this tutorial presents a prototype of a knowledge-based platform that for the first time allows an effective classification of forensic short messages (SMS) with regard to their case-specific relevance by detecting case-relevant dialogs with a novel method. As an example of an application for preventive investigations, the prototype SoNA is presented, a further implementation of a knowledge-based platform that allows the analysis of social networks for the detection of potentially dangerous organizations and groups as well as for the prediction of hazardous events, as a basis for long and short term security planning.