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Formalization of criteria for social bots detection systems

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Abstract

Due to the development of social networks in the Internet, the programs providing automatic users' actions imitation obtained a wide circulation. Common usage of these programs causes informational noise. The research considers a possibility of fuzzy logic mathematical apparatus application for the recognition of these programs' activity in social networks.

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Keywords: Information security; social networks; artificial intelligence; social bots; formalization of criteia

1. Introduction

Rapid development of popular social networks ("Facebook", "LinkedIn", "Twitter", "VKontakte" and etc.) continues in present time (Drevs and Svodtsev, 2014). There is a common feature for all of them that accounts registered not always correspond to real persons and can be "*fake*"-ones. Due to the absence of serious technical restrictions on new accounts creation in the most of all Internet-resources, specialists in social media management (reputation management, advertisement, spam distribution and etc.) have an opportunity to prepare a huge amount of "*fake*" user accounts to execute coordinated virtual activities and thereby distort natural bulk information available. All this also helped by usage of special programs, that imitate human behavior while operating social networks and called *social bots*.

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