

Hamdan S., Hudaib A., Awajan A., 2018. Hybrid Algorithm to Detect the Sybil Attack in VANET. Proceedings of the The Fifth International Symposium on Innovation in Information and Communication Technology (ISIICT 2018). October 31 - November 01, 2018, Philadelphia University, Amman, Jordan.

Abstract

Sybil attack is a severe attack on vehicular ad hoc networks (VANET). In which the intruder maliciously claims or steal multiple identities and use these identities to disturb the functionality of the VANET network by disseminating false identities. Many solutions have been proposed in order to defense the VANET network against the Sybil attack. In this research an improved algorithm will be proposed, taking advantage the footprint and privacy-preserving detection of abuses of pseudonyms (P2DAP) methods. The hybrid detection scheme will be implemented using the ns2 simulator. P2DAP acting better than footprint when the number of vehicles increases. In the other hand, the footprint algorithm acting better when the speed of vehicles increases. A new hybrid algorithm will be performed that depends on the encrypted, authentication and on the trajectory of the vehicle. The scenarios will be generated using SUMO and MOVE tools.