

SECURED INTEGRITY AND BATCH AUTHENTICATION IN VEHICULAR Ad-Hoc NETWORK

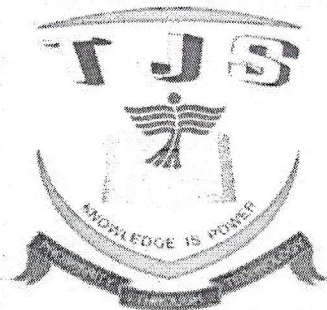
A PROJECT REPORT

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BACHELOR OF ENGINEERING
IN
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T.J.S ENGINEERING COLLEGE

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BONAFIDE CERTIFICATE

Certified that this project report "SECURED INTEGRITY AND BATCH AUTHENTICATION IN VEHICULAR Ad-Hoc NETWORK" is the bonafide work of the following students.

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INTERNAL EXAMINER




EXTERNAL EXAMINER

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ABSTRACT

Recent development in intelligent transport systems (ITS) has led to the improvement of driving experience in vehicular ad-hoc network (VANET) systems. Providing a low computational cost with high serving capability, however, is a critical phenomenon in the current VANET system. In the existing scenario, when the authenticated vehicle user moves from one roadside unit (RSU) to another RSU region, re-authentication of the vehicle user is required by the current RSU, which increases the computational complexity. To overcome the above-mentioned challenge, a 6G enabled authentication protocol is developed in this work. In this suggested process, 6G enabled batch authentication is integrated with VANET, which enables the authentication of the vehicle user without the involvement of a trusted authority. Moreover, the integrity of the message and privacy of vehicle users are preserved in the batch authentication network. Even though many Secured integrity preservation scheme have been proposed recently, the existing schemes were not focused on conditional anonymity. However, in our proposed scheme, conditional privacy is introduced to revoke the malicious vehicles in the case of disputes and to avoid further damage to the VANET system. As a result, the proposed scheme provides an efficient mechanism for anonymous authentication, privacy, and integrity preservation with conditional tracking. Finally, the defense against different security threats is explained in the security analysis section, and the performance investigation section shows the competence and efficacy of our method with similar related methods.




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