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 3rd International Conference on Cryptography, Security and Privacy, ICCSP 2019 with Workshop  
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 Code 147274

### “Forent – Vehicle forensics for car rental system” (Conference Paper)

Saufi, N.N.C. [✉](#), Ab Razak, N.S.M. [✉](#), Mansor, H. [✉](#)

Kulliyah of Information and Communication Technology, International Islamic University, Malaysia

#### Abstract

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Car rental agencies primarily serve people who require temporary vehicles. However, many car rental damage scam cases involving car renter fail to present any evidence and being unfairly charged, for the damage that did not happen during rental. Concerning the current car rental systems that only allow customers to inspect the physical condition of the car, the objective of this project is to develop a mobile application for car rental system, FoRent, that implements the car diagnostic features. Through this system, the car owner and car renter will be able to record the physical condition and retrieve forensic data of the car using ELM327 device, before signing the rental agreement. In order to reduce security risk, this project introduces a security protocol to provide the integrity and availability of the data in FoRent. Enhancing the existing paper-and-pen car rental system, FoRent is remarkable as it introduces these special features that meet the requirement of the car rental company and customers. © 2019 Association for Computing Machinery.

#### SciVal Topic Prominence [i](#)

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#### Author keywords

[Car rental agencies](#) [Car rental system](#) [ELM327](#) [On-board diagnostic \(OBD\)](#) [Vehicle forensics](#)

#### Indexed keywords

Engineering controlled terms: [Chromium compounds](#) [Cryptography](#) [Forensic science](#) [Vehicles](#)

Engineering uncontrolled terms: [Car rental](#) [Car rental systems](#) [Diagnostic features](#) [ELM327](#) [Mobile applications](#)  
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