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Detecting Abandoned Vehicles in Public Vehicle Parking Environment-Based on Time

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It is common to come across Abandoned Vehicles (AVs) in many of the public Vehicle Parking Environment (VPE) facilities. Very few if any of these vehicles are really abandoned; in most scenarios Motorists drive into a public VPE facility then walk out, creating an impression that they are going to be back in a short while, only to return after a day or so. Lack of proper data sharing for Vehicle Verification (VV) is not making the situation any better. In some cases, vehicles are left and nobody turns-up to claim them for days. The public VPE company is left in limbo, not knowing what to do with such vehicles since they do not have a proper mechanism to verify vehicle ownership. AVs pose security risk to the company managing the VPE facility and the public. The results of the study established occurrences of AVs within the County of Nairobi, and developed a prototype named Owner Vehicle Verification System (OVVS), which did Vehicle Verification (VV) for AVs by remotely “fetching” for vehicle ownership information via the internet from a dummy KRA registry, and returned information on AV within 24 hours as per the definition of AV in this study for local context. The system managed to detect 12 AVs and hence a reduction in risks associated with AV.

**Keywords:**

Abandoned Vehicle, Vehicle Verification, Motorist, and Vehicle Parking Environment.