Abstract

Today, automation driven by information technology has overtaken the usual traditional manual operation in every key sector of human endeavor. It has greatly improved both productivity level and quality of service amongst other benefits. The existing bus transit system in South Africa (SA) is still characterized by inefficient manual operations among which are poor quality of service, non-user friendly and inefficient passenger identification. The pivotal economic and developmental role played by the bus transport sector in SA measures the weight of the need to fully incorporate advanced information and communication technology tools into its operations. This requires a system that automates all the bus transit services and has the capability to authenticate passengers electronically. Therefore, this paper proposes an automated bus transit system that offers e-subscription and real-time biometric passenger authentication as a solution to the challenges faced by the bus transit industry in SA. In addition, we have developed a novel system prototype with the technology required to fill the service gap.
Towards Effective Bus Transit Service in South Africa: Automated Passengers’ Authentication


- B. Solutions, C. Fingerprint, P. Free, E. Integration, M. Y. Own, A. Securely, P. Recognition, and I. Programming, "FingerTec’s Online Fingerprint Identification System or OFIS is a biometric solution for online verification and enrollment. The FingerTec. &quot;

Index Terms

Computer Science Automated Systems

Keywords

Transportation Automated Real-time Bus