

2021-10-25

Design of a Passenger Security and Safety System for the Kayoola EVs Bus

Koojo, Ivan

IEEE

<https://doi.org/10.1109/AFRICON51333.2021.9570932>

Provided with love from The Nelson Mandela African Institution of Science and Technology

Design of a Passenger Security and Safety System for the Kayoola EVs Bus

Ivan Koojo, Dina Machuve, Silas Mirau, Simon Peter Miyingo

To download the complete text, click that link.

DOI: <https://doi.org/10.1109/AFRICON51333.2021.9570932>

Abstract

Kiira Motors Corporation seeks to avail customer satisfaction, by providing noteworthy passenger experience on its market entry product, the Kayoola EVs bus through deploying a passenger security and safety system to curtail rampant snags like passenger insecurity, loss of passenger property, shortcomings in management and accountability as well as the spread of contagious sicknesses like COVID-19 which are not alien occurrences on commuter taxis and buses in African cities. On this project, a comprehensive system was designed for remote CCTV video surveillance, video analysis for people detection, passenger count and social distance analysis, as well as digital contact tracing to solve the challenges. It denotes significant potential to improve the security of property and passengers, shrink the risk of the spread of contagious diseases, enable timely capture of contact tracing records and lessen the burden of management, monitoring and accountability for the numbers of passengers on buses for fleet owners.

Keywords

Kayoola EVs bus; Passenger; Security; Safety