IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, May 2023

AI Smart Gun using ESP32 Cam

SR Sirish, Srinivas CK, TB Srishti, Yogitha Singh D, Deepika D Pai

Department of Electronics & Communication Engineering Vemana Institute of Technology, Koramangala, Bangalore, India

Abstract: The creation of a smart gun using ESP32-Cam is accomplished using the surrounding data and Internet of Battlefield Things (IoBT) in conjunction with a server which is further connected to the ESP32-CAM for more precise identification of the enemies. The user receives information from the server, which serves as the main framework of the system. Here, the server that has the acquired data goes through several processes to provide precise information that is then given to the user. After the user receives the information from the server, the output of the information is shown on an OLED panel that is positioned on the equipment. The user receives directions from the OLED display, which in turn aids in enemy detection.

Keywords: ESP32

REFERENCES

- [1]. Sergei Astapov, Johannes Ehala, Julia Berdnikova, Jürgo-Sören Preden. "Gunshot Acoustic Component Localization With Distributed Circular Microphone Arrays" Page: 1186-1190, 2015.
- [2]. Angelo M.C.R. Borzino, Jose A. Apolin Ario Jr., Marcello L.R. de Campos, and Carla L. Pagliari, "Gunshot Signal Enhancement For DOA Estimation And Weapon Recognition" Page :1985-1989, 2013.
- [3]. Angelo M.C.R. Borzino, Jose A. Apolin Ario Jr., Marcello L. R. de Campos "Estimating Direction Of Arrival Of Long Range Gunshot Signals" Page:1965-1969, 2014.
- [4]. Ajay Kumar Bandi, Maher Rizkalla, and Paul Salama, "A Novel Approach For The Detection Of Gunshot Events Using Sound Source Localization Techniques" Page: 494-497, 2012.
- [5]. Rigel P. Fernandes and Jose A. Apolin 'Mario Jr., Antonio L. L. Ramos "Bearings-Only Aerial Shooter Localization Using A Microphone Array Mounted On A Drone" Page:886-890, 2017.
- [6]. Pathrose Nimmy, K Raveendran Nair, R Murali, K R Rajesh, Mathew Nimmy, S Vishnu "Analysis Of Acoustic Signatures Of Small Firearms For Gun Shot Localization" Page: 2 2 8 2 3 1, 2016.
- [7]. Angelo Marcio Cardoso Ribeiro Borzino1, José Antonio Apolinário Jr.1, Marcello Luiz Rodrigues de Campos, "Consistent DOA Estimation Of Heavily Noisy Gunshot Signals Using A Microphone Array" Page:1856-1865, 2016.

DOI: 10.48175/IJARSCT-9681

