Gun Technology Intervention in Mitigating Mass Shootings

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Abstract

Mass shootings targeting schools have been prevalent over time in the United States. As a result, of the school tragedies related to gun violence, the Office of the President issued a Memorandum on promoting Smart Gun Technology in 2016. The 2016 Report published by DOJ, DHS, and DOD issued baseline specifications on Research and Development in smart Gun Technology as an alternative solution to Gun Violence Prevention. According to a 2016 Survey by Johns Hopkins, 59% of American gun owners were willing to buy a smart gun. The survey findings debunked the narrative of the unlikelihood of ready market for smart Guns. Despite the measures taken by enactment of Background checks laws and deterrence measures against mass shootings by armed law enforcement human intervention and response to mass shootings has not been adequate in preventing loss of life. This proposal recommends a multifaceted smart Gun technology that detects Gun threats in public spaces such as schools in real time. The proposed technology ,further evaluates the technical mechanisms of the traditional firearms and Biometrics smart guns and why autonomous Ambient Intelligence technology embedded in smart guns and designated public spaces may be reliable as a technological intervention to end mass shootings in the United States.

Keywords: Smart Gun , Mass Shootings, Ambient Intelligence, Biometrics

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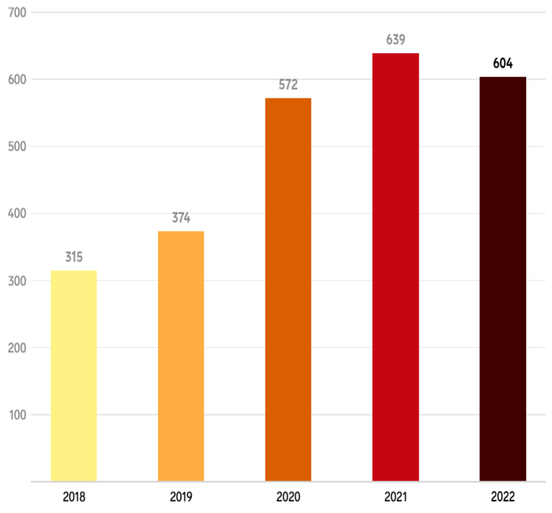
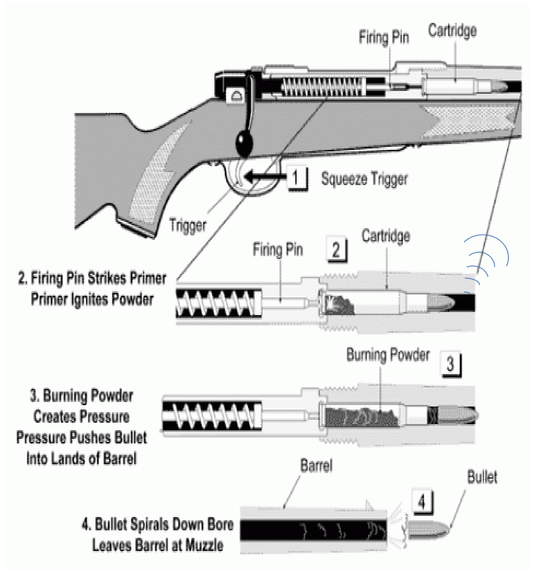
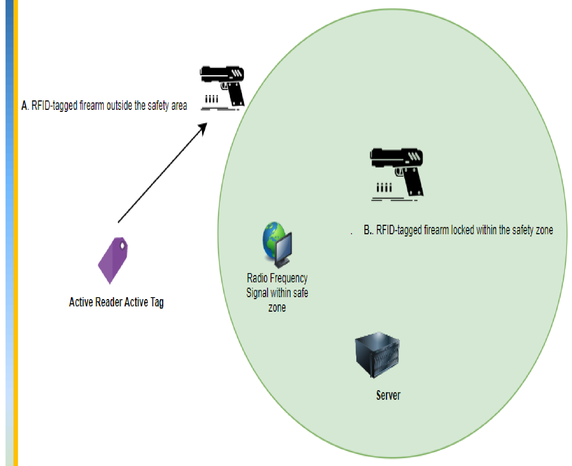
Recent Mass Shootings



How a gun fires



Radio Frequency enabled Smart Gun in a Safety Zone



Smart Guns (A, B) operate differently when in or outside the network-restricted safety zone

Proposed Technology

- Development of an intelligent RFID enabled firearm that locks in real-time within restricted safe zones such as schools.
- Embed IoT Security infrastructure within restricted safe zones to detect unauthorized smart guns.
- Replace Biometric smart gun features with real time & autonomous Ambient Intelligence Technology.
- Deploy the RFID Restricted Network Architecture in Safe Zones (schools, malls)

Summary

•If adopted the RFID Network restricted firearm will play a big role in enhancing public safety in schools and public spaces by reducing mass shootings through real time threat detection.

•This research project aims to :

-Develop a prototype and encourage more research in smart gun technologies .

-Advocating for adoption of smart solutions in Mitigating Mass Shootings.

-Encourage private guns manufacturers in investing in smart gun technologies.

-Installation of Ambient Intelligence Technologies in United States Schools

-Achieve a utility level in gun technology by the gun manufacturers and the American public.

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Related Publication

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