

## AI Based Facial Recognition System for Secure Entry in Defense Zones

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### Abstract

Reliable and effective access control is necessary for defense zone security. This paper discusses the potential of Artificial Intelligence (AI)-based facial recognition systems as a powerful mechanism for restricting access to important defense zones. These systems deploy crisp algorithms to provide speed, touchless, and accurate identification of authorized users that can reduce and enhance physical security vulnerabilities. We evaluate the key capabilities of AI-facilitated facial recognition systems, such as real-time biometric capabilities and integration with existing defense systems and its multiple layers of protection. In particular, we consider data integrity, vulnerability to spoofing, and balance the ethical implications of a potentially strict security paradigm with personnel privacy. Overall, AI-enabled facial recognition presents a smart, flexible, and disruptive technology for continued enhancement and protection of defense zones from widescale threats.

### Keywords

AI, facial recognition, defense security, access control, biometrics, secure entry.