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## **Security Locker System Using Face Recognition and OTP**

Prof. D. B. Ghorpade<sup>1</sup>, Saidhane Viresh<sup>2</sup>, Mahajan Roshan<sup>3</sup>, Songire Mayuri<sup>4</sup>, Kasar Priyanka<sup>5</sup>
Faculty, Department of Information Technology<sup>1</sup>
Students, Department of Information Technology<sup>2,3,4,5</sup>
Pravara Rural Engineering College, Loni, India

Abstract: The Face recognition plays a vital role in various applications, including biometrics, surveillance, security, identification, and authentication. In this project, we design and implement a bank locker security system where access is granted only to individuals whose faces are available in the training database. The system utilizes Haar cascade, Local Binary Patterns Histogram (LBPH) for face detection and recognition. Initially, human motion is detected to identify potential access attempts. Once a face is detected, recognition is performed to verify the identity and determine whether the person is authorized to access the locker. Additionally, the system enhances security by incorporating liveness detection to prevent spoofing attempts. Experimental results demonstrate the effectiveness of the proposed bank locker security system in restricting unauthorized access and improving overall reliability.

Keywords: Face Recognition, Haar cascade, LBPH Algorithm, Liveness Detection





