

Facial Recognition Enabled Attendance Systems

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Abstract: *This study explores the creation and deployment of an attendance system based on facial recognition, designed to overcome the drawbacks of traditional attendance methods. Utilizing facial recognition technology alongside the K-nearest neighbors (KNN) algorithm, the system presents a hands-free and automated solution for managing attendance in schools, workplaces, and industrial settings. The paper details the entire process, from data collection and preprocessing to model training and testing, demonstrating the system's promising capabilities in accuracy, efficiency, and user-friendliness. By thoroughly examining the system's development and evaluating its performance, this paper seeks to advance the field of attendance tracking and support its practical adoption in everyday environments.*

Keywords: Facial Recognition Technology, Attendance Management, KNN Algorithm, Automated Solution