Smart Watch Unlocking and Implementation with Facial Recognition

P. Thirupathi[1], K. Keerthana[2], M. Shirisha[3], T. Sathwika[4], V. Pravalika[5]

Assistant Professor, Department of Electronics & Communication Engineering[1]

UG Students, Department of Electronics & Communication Engineering[2,3,4,5]

Christu Jyothi Institute of Technology & Science, Jangaon, Telanagana, India

Abstract: *The integration of facial recognition technology with IOT-based smart watches, enabling a seamless and secure user experience. In addition to facial recognition, the smart watches are equipped with a wide range of sensors to capture measurements such as heart rate, steps taken, sleep patterns, and more. By the sensor measurements, the smart watch interface can provide personalized health and fitness, real-time notifications, and contextual recommendations. The research aims to enhance the functionality and usability of IOT-based smart watches by leveraging facial recognition and comprehensive sensor measurements. We explore the design, implementation, and security aspects of a system that utilizes the watch's camera to authenticate users based on facial features. The implementation involves the development of a robust facial recognition algorithm tailored for the limited resources of a smart watch.*

Keywords: Smart watches

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